THE NATION'S SCHOOLS

DEVOTED TO THE APPLICATION OF RESEARCH TO THE BUILDING, EQUIPMENT AND ADMINISTRATION OF SCHOOLS

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Looking Forward

IT'S a little book but packed full of dynamite for the statistical economist and for many of our educational researchers. Bassett Jones called it "Horses and Apples," or a study of index numbers. John Day is responsible for its publication.

Mr. Jones' chief argument, built around the concept of abstract numbers, seems perfectly simple and sane. He maintains that we cannot add horses and apples and secure a result that has any mathematical or economic meaning. With delightful simplicity and brutal directness, he punctures the assumptions of the Bureau of Labor, Irving Fisher, Warren and Pearson and numerous other progenitors of index numbers. Final acceptance or rejection of the Jones statements may depend upon their validation by mathematicians.

If the author is correct, this little monograph bids fair to overturn many pet theories of the economists and will probably have a significant effect on governmental recovery policies. The trek of mathematicians to Washington to replace farm economists may even be reasonably expected at an early date. It is possible, in fact highly probable, that much of the statistical method on which some of our mooted educational research rests may be subject to serious overhauling in light of Mr. Jones' contentions. An interesting thesis, not to be able to add horses and apples!

THERE is no activity in public school administration today that needs more careful definition and understanding than public relations. One of the subcommittees of the general committee on interpreting the schools to the public produced, during the Cleveland meeting, a brief summation of essential principles underlying such programs. This presentation should be of real importance in directing the thinking of superintendents, principals, and teachers. It was compiled by Dr. M. R. Keyworth, superintendent of public schools, Hamtramck, Mich., and Dr. Paul F. Voelker, superintendent of public instruction for Michigan. It is reproduced here without contraction:

"A sound public relations program for public education must be based upon and correlated with a clear definition of the objectives of public education. While it is not the responsibility of educators to formulate those objectives, it is their function to assist in the crystallization of the goals of public education as expressed by society through pertinent legislative enactments and court decisions, to interpret the old objectives in the light of changing social conditions, and to cooperate with other leaders of society in evolving a recognition of certain new objectives.

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"All contacts between the school and the public, regardless of the source of initiative of those contacts and regardless of their good or ill effect, must be considered in a general view of 'Public Relations.' A program of public relations organizes those contacts into a 'factual informational and interpretative service for the purpose of keeping a responsive public informed of its educational program' and for the purpose of securing helpful lay participation in the formulation of educational policy. The improvement of student welfare must be the goal of all educational interpretation.

"The effective and sound public relations program will reach all the people in all strata of so-

ciety with complete information so presented that both understanding and appreciation of the schools are engendered. Selection of materials will modify the completeness of presentation only insofar as the welfare of the students is thereby concerned. The propagandic motif must be avoided.

"The proper agents of the public relations program are the members of the board of education, the administrators, teachers and all others professionally or occupationally utilized in the administration of the school system. For these agents, there should be provided proper training to reveal to each one his obligation to assist with making effective the public relations program of the school concerned. That training will be most effective which approaches the agents as cooperators in the project rather than as job holders with a specific public relations duty.

"The means at the disposal of the agents to make the program effective are numerous and varied. Every contact, direct or indirect, personal or objective, should be weighted in terms of its public relations value.

"Effective appraisal of the efficiency of the school program, in terms of public reaction, is essential to continuously successful public relations work. A specifically planned method for such appraisal is essential. There should be some more scientific gauge to public reaction to school efficiency than that which is implied in the measure of financial support."

DR. H. S. PRITCHETT, president emeritus of the Carnegie Foundation for the Advancement of Teaching, presents a thought-provoking statement in the 1933 report recently made public, regarding the need and the probable effects of attempting to secure a secretary of education in the presidential cabinet. By implication he shows the incompatibility between the present demands for permanent federal subsidy, assured to us by National Education Association leaders as completely devoid of direct or indirect federal control, and the pressure for cabinet recognition.

The history of cabinet evolution is obvious to any student of United States history. It would be extremely difficult to have a secretary of education without creating the means by which he would control education. It would eventually result in a federal bureaucracy for educational control through fiscal subvention. A secretary of education without executive powers comparable with those of other fellow cabinet members would be an impossibility. He would have no standing, no influence and little budget. It would not take long to build up excessive federal machinery for control. It would not be long before our public system of education would be completely controlled from Washington. In all probability the natural advisers would be the educational lobby represented by the secretariat of the National Education Association, just as the Chamber of Commerce of the United States has become adviser to the Department of Commerce.

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Can the states afford to delegate their power to an extralegal professional group? Can a democratic political organization afford it? Dare we tamper with the possibility of the states losing control of education? We think not. Forty-eight independent state systems of public education close to the people are a better guarantee for a continuation of our democratic order than the same systems centrally subsidized and consequently centrally controlled. The need for a unified educational program built around a central core of commonly accepted national cultural patterns can be achieved through the influence of leadership without centralized fiscal or legal control. Despite their legal independence the forty-eight state school systems in the United States seem now remarkably similar in organization, in type and in their general curricular practices.

I wish every thinking member of the profession would read Doctor Pritchett's significant summing up of the dangers attendant upon this prestige-urge by one of our professional groups. Let us be cautious and chary about federal aid for anything except physical projects, such as school plants and grounds, and let us be particularly cautious about urging a secretary of education.

IT HAS been our practice for many years to emotionalize the child to such an extent that it has clouded our thinking. Today, any piece of proposed legislation, regardless of its merits or its relationship to fundamental social policy, that deals with any aspect of child life is so emotionalized by its supporting interest groups that rational analysis is made dangerous if not impossible.

This situation prevails today with respect to the proposed amendment to the federal constitution prohibiting child labor. Considered a dead issue two years ago, it has been revived and has some prospect of being passed in its present form. The emotional barrage has been laid down and anyone who dares raise voice against it or merely beg cautious review is liable to heavy reproof by several potent interest groups. Both Dr. Nicholas

Murray Butler and Alfred Emanuel Smith have been subjected to severe verbal castigation without having a real opportunity to make their opposition understood. Neither of these able gentlemen can be considered an enemy of childhood or of public education. Their records are clear on that score.

As the intelligent opposition to the adoption of the proposed amendment that gives the control of child labor to the federal government is analyzed, it does not appear that there is much difference of opinion respecting the desirability of protecting children from exploitation in industrial and commercial fields. Every individual with social perspective is against child labor. The difference arises with respect to the best method to be used to achieve the desired results.

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A clear-cut analysis of difference in methods of legislative approach has been made by Alfred Emanuel Smith in his editorial swan song in the March issue of the *New Outlook*. He points out that the issue is over the type of power given to the federal government and not over the question of child labor. He makes comparison of the type of power in the proposed amendment with that of the late eighteenth amendment, and shows similarities in method that may cause like difficulties and opposition if adopted. He suggests instead a substitute amendment that reads: "The transportation or importation into any state, territory or possession of the United Sates for delivery or use therein of articles manufactured by the labor of persons under sixteen years of age, in violation of the laws thereof, is hereby prohibited."

There is great merit in Mr. Smith's suggestion, and its acceptance by the groups interested would have the same effect as the proposed amendment, without the objectionable feature of extending federal power into a field which should be directly under state control.

If we can look at this problem rationally and all agree on the need for elimination of child labor, there is definite room for differences respecting method and procedure. Opposition to certain methods should be recognized today as desirable. Let us correct possible mistakes before it becomes too difficult. It is possible to secure these results without giving direct control over the child to the federal government. This power should be logically retained by the states. Possibly the objections of Doctor Butler and Mr. Smith may be restudied in light of their real significance and their values considered. Far-reaching legislation of this type requires free, calm, careful, objective discussion.

A FAVORITE method used by many individuals in the field of administrative research has been to bring together mass statistics on teachers' salaries, develop what might be termed an arithmetical mean or average salary, and then compare such data with the returns from other professions, always indicating the meager rewards from teaching. As propaganda, this practice might by a wide stretch of the imagination be defensible. It may also reveal a general trend but, as valid research it is dubious.

The so-called massed "average salaries" are meaningless because they violate the simple rules of mathematical procedure. They are not possible of rational interpretation. There are too many variables. The range in preparation of the legally qualified teacher differs from completion of the tenth grade through the holding of the doctorate. Teachers also vary by type of position. Salary differentials between men and women also exist. Public school schedules may be roughly classified into two major types: those whose payments are based on type of school and those determined by length and quality of training. At present these types are rather evenly divided in practice. Because there are differentials in training even when payments are made by position, both types may be considered as reflecting rewards due to differences in the extent of training.

From one aspect salaries paid to teachers are based on the value and appreciation of their services. Since salaries vary directly with training and experience, which theoretically at least reflect skill, both skill and the presupposed increase in skill are directly reproduced in the salary schedules. It seems reasonable to assume that, other conditions being equal, rewards vary directly with training and skill.

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Comparative statistics of teaching rewards should be developed in terms of classes or groups, differentiated by the length of training and the relationship of length of training to the typical position-development schedule. One cannot logically take the salary of the rural teacher who is a graduate of only the tenth or twelfth grade, with several months or a year of professional training, and add it to the salary paid the city teacher with five years of training beyond the twelfth grade, divide the sum by two and call the result the "average salary of teachers."

Money is also a variable both in time and place. It is debatable procedure to take money salaries from different parts of a state and from different

sections of the country without taking into consideration the difference in purchasing power. To have validity intrastate and interstate comparisons must be expressed in terms of real wages or purchasing power. If these two changes alone were made many of the present differences would be ironed out and a closer distribution secured.

There are several other variables that should receive study but the two mentioned here are sufficient to indicate the weaknesses of present gross statistical methods that are seriously labeled "research." Incidentally, mathematical analysis that would present the exact conditions might be much more helpful in locating the problem, developing a program and securing corrections than the glaring statistical comparisons now developed for propaganda purposes. The establishment of confidence in both methods and results in educational research is a primary obligation on our researchers.

JAMES WILLIAM CRABTREE, secretary of the National Education Association since 1917, became seventy years of age on April 18, and is thus automatically eligible for retirement with an adequate pension on July 1, 1934. A grave responsibility rests upon the officers who are empowered to select his successor.

This secretarial position should be of exceeding importance to education and not lightly treated as merely a job for an ambitious person. The new secretary must be a man of national reputation in education. He should preferably be in his middle forties so that the organization may count on at least twenty years of active service. He should possess broad vision and a thorough understanding of the vital problems of public education and should be completely independent of the several small groups and institutional cliques that seek from time to time to dominate the professional field through control of the National Education Association. He should possess the personality and ability to convince the profession as a whole of the necessity of strong healthy professional solidarity achieved without local administrative pressure to impress members. He should have vision that will carry him far beyond the concept of the national organization as just another pressure-lobby at Washington. He must be broadminded and realize that free discussion of a problem is the most certain path to its solution.

While we have no particular individual in mind who will meet these specifications it is certain that the profession has many such members. It is the duty and responsibility of those to whom the power of choice has been delegated to make this search and provide for a new secretary at the beginning of the new fiscal year. The association now numbers approximately one teacher out of five, hardly a majority representation for the profession. Every public educationist should be a member. The attainment of this objective may be possible if the right executive is chosen and the proper policies are established.

THE demand for the "total liquidation of illiteracy" in the United States has some aspects that verge on the ridiculous when made seriously by mature educationists. Some of the most earnest exponents in pointing out the problem of individual differences in developmental capacity in the very next breath insist on "total literacy."

It is extremely questionable whether the attempt to teach reading in the traditionally accepted sense to the lower 1.5 per cent is not a great waste of time and money. True, many of very low intelligence may be taught the mechanics of reading just as a parrot may be taught some of the elementary mechanics of speech. Comprehension is a bird of a different color. Specialists in the education of exceptional children have long since given up the generalized reading ideas and now concentrate their efforts on teaching low grade mentalities to avoid labeled dangers in their social environment. It is extremely questionable whether 98 per cent literacy is not the highest possible rational goal of achievement.

What has public education accomplished in the United States in the "liquidation of illiteracy"? In 1870, the total illiteracy amounted to 20 per cent. In 1930, it had been reduced to 4.3 per cent. Sixty years! That seems like a long time to secure a 15 per cent reduction. However, educational problems cannot be divorced from the underlying social and economic problems or from the basic cultural patterns. When all of these are taken into consideration, the achievement must be considered good.

Thirty states in 1930 showed less than 4 per cent of illiteracy while eighteen ranged from 4 to 14.9 per cent. Those states without racial or immigration problems have the lowest amount of illiteracy. It leads to a possible conclusion that no matter how effective a state's system of education may be, a sudden or a continuous stream of immigration will increase, for that period, the percentage of illiteracy. It also indicates that social conflict between races may be as potent a factor in the retention of illiteracy as lack of funds.

The Editor

Schools and the New Order

By OSCAR L. CHAPMAN
Assistant Secretary of the Interior

MOST of us can remember when elementary education had one objective: to train the child in subjects that were immediately indispensable to him in his mature years.

When the child could read and write and work problems in elementary arithmetic, it was felt that society had fulfilled its educational obligation to him and that he possessed sufficient knowledge to enable him to live happily and to earn his livelihood. That period has fortunately passed. We realize now that the individual must be trained in those other subjects of a greatly broadened curriculum that make for a full and complete life.

Let us grant that conditions in schools today are depressing. When we recall that a comparatively recent survey showed that many hundreds of schools are now closed, that there is no provision for thousands of children, that there are far fewer teachers employed today than in 1930, and that the salary level for those who are employed is distressingly low, we realize that it is a desperate situation that must be faced with intelligence and courage. But there has been a qualitative as well as a quantitative decline in education, especially in art, music, physical education, health and home economics instruction.

In other words, where education has not ceased entirely, in many instances emphasis is laid on curtailment of those very subjects that are of vital importance in educating the citizenry for the new order. Yet despite the plethora of unemployed teachers, the average teacher is carrying a greater burden than is desirable either for her or for the pupils.

The child and his education are so definitely affected by economic conditions that we must remedy these conditions before we can advance satisfactorily toward a new school for the new era. That we are advancing from one age to another is a certainty that must be recognized. That we

are in a transitional period between the machine age and the power age is the opinion of most competent observers of modern trends. Our lives have been conditioned by the habit patterns of the machine age, as the lives of our grandfathers were conditioned by the habit patterns of a handicraft civilization.

The transition from a handicraft civilization to a machine civilization profoundly altered not only our entire industrial structure but also all relations in our social life. It is equally true that the transition from the machine age to the power age is not only changing the whole technologic character of industry, but it is also shaking social relations to their very foundations. It is especially important that educators face these facts because education must be the most powerful factor in making the necessary adjustment.

It is not necessary to elaborate on the differences between the machine age and the power age. Walter N. Polakov in his book, "The Power Age," gives a clear and forthright treatment of the subject. The machine age was ushered in by the introduction of the steam engine. Little did the first man who dreamed by a steaming kettle of the inherent force in steam realize that he was initiating an era of mass production and a consequent growth of large industrial centers. Little did he dream that steam, while conferring untold benefits, would enslave thousands of women and children in chains forged by the self-interest of employers.

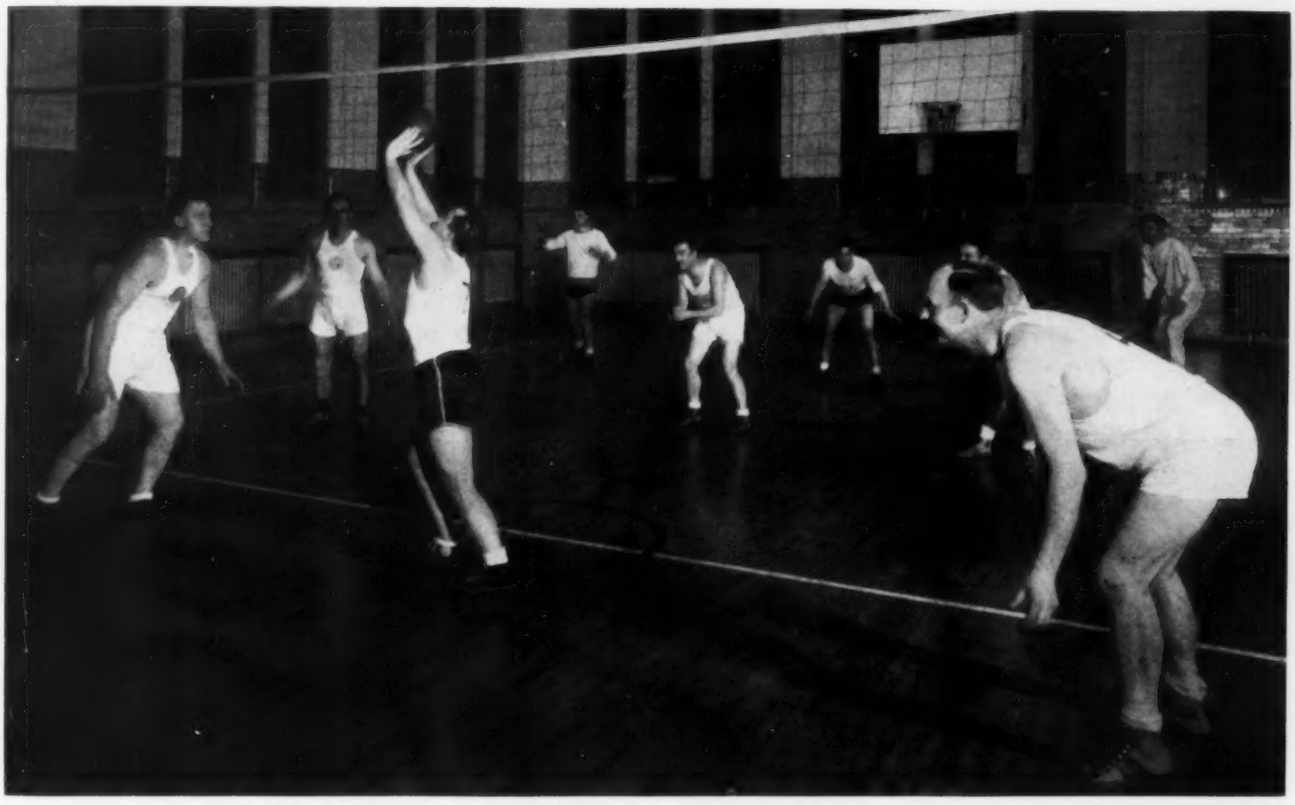
The development of electrical power has thrown us headlong into a new era. The machines were stationary and of necessity dependent on the source of steam power. But electrical power is available where and when it is wanted, and, consequently, it is now possible to decentralize the operations of industrial plants. Successful production may now be achieved without the congregation in large cities of vast congeries of workers. We must not lose sight of the fact, however, that the development of electrical power has drastically reduced the number of workers required. This in turn necessitates the shortening of hours of labor and the elimination of children from industry.

The power age is also ushering in an age of plenty. This country and the world can be flooded with a superabundance of goods. But unless consumers can purchase the goods we shall be destroyed by the very thing that can bring us an age of leisure.

If the foregoing conclusions are correct, does it not necessarily follow that our old habit patterns, our former worship at the shrine of individualism, must give way to a new ideal of cooperation? And does it not necessarily follow that the problems of the schools will be increased because upon them will fall the burden of educating both the child and the adult to an intelligent application of the new leisure? So far as the child is concerned, his period of industrial usefulness will start much later. Even now it is difficult for anyone under eighteen years of age to find employment.

It follows, then, that educational opportunities

Schools mean more than the three R's. They need well stocked libraries and other specialized facilities.



A constantly increasing number of adults are becoming interested in evening recreation classes.

must be provided not for a few but for practically all children between fourteen and eighteen years of age. This education cannot, however, meet the need if it is limited to the traditional curriculum of the old type of school.

One criticism of the present educational system that I should like to offer is that in most states the welfare of the child has been dependent on the particular part of a state subdivision in which he happens to reside. Any educational system that is efficient and just must provide the same degree of educational opportunity for the underprivileged child in the rural fastness as it provides for the child in the large city. This end could be attained if each state put all its public school funds into a central treasury and then disbursed them in accordance with the needs of the child. Is it right that the city child should have spent on him about half again as much money as the rural child? Is it right that the city child should receive schooling for nine months in the year while in some rural communities the child must be content with five?

The years spent in the elementary school are of paramount importance in the development of personality. During these years children form those initial habits of personal conduct, study and play that are to serve as a foundation for all they later learn and practice. The elementary school in the power age must be a children's community in which all the various needs of children are satisfied in a way that will develop qualities enabling them to cope with the requirements of a rapidly changing society.

To be sure, children must early be taught the traditional three R's. But in the present age a knowledge of the three R's is hardly sufficient as even a foundation upon which to erect the superstructure of an education for individual happiness and social usefulness. The three R's, for example, never guaranteed anyone's action in a crowd, at the office, at the theater, in the traffic jam, or in any of the many other more or less complex situations encountered daily in modern life. Social conduct is rather determined by emotional training, which for the child in school is received not so much in the classroom as in his contact with his fellow pupils.

It is in this connection that play is of such supreme significance. Play, made up of games in which all children can take part, more than anything else I know of in the child's life, develops qualities of alertness, fair dealing, cooperation, courage and the submergence of self in the interest of the group, virtues of which the new society, more than any we have ever known, will stand so much in need. Furthermore, the value of developing early in life continuing interests in games can hardly be exaggerated. If, as William James says, a child grows up and does not learn to play games, probably he never will learn, "and though the best

of opportunities be afforded him for learning these things later, it is a hundred to one that he will pass them by and shrink back from the effort of taking the necessary first step, the prospect of which, at an earlier age, would have filled him with delight."

But it is not enough for the education of today to provide a new type of curriculum only for the nation's boys and girls of grade school, high school and college age. There are other groups of potential learners who are just as much in need of educational advancement as are those younger members of society of whom we have been accustomed to think as properly belonging to the school age. What about the older sisters and brothers, even the fathers and mothers, of these school children? Are they to be denied the advantages of further schooling? What of their readjustment to the tremendous social and economic changes of the New Deal? Should we expect them to go unassisted through this difficult period of readaptation to new concepts of living and a new manner of life? Furthermore, how about the increased leisure that they will have as the result of the power age? What is the obligation of the school in guiding and directing them in the most profitable use of their leisure time?

We have today come to recognize education as a developmental thing, a process not confined to a few years of a person's life, but properly belonging rather to the whole of every person's life. If this view of education has the validity that common sense tells us it must have, the task of the schools is really never finished. Responsibility for the educational advancement of every adult who wishes to improve himself increases immeasurably the burden of the educational system. But it is a welcome burden, for with it come manifold opportunities to add to the beauty and richness of life.

One of the most profound tragedies resulting from the contemporary economic breakdown is the frustration and deterioration that often accompany the inability of the pupil to continue his education after graduation from grade school or high school. I have often heard professional educators deplore the interruption of a child's education in the lower grades, owing to economic difficulties of his family or depletion of funds for education in municipalities, counties and states. This interruption of a child's education, for even a short period, is to be obviated if possible.

Evening dressmaking classes are one means of providing further schooling for the mothers of school children.

To me an equally serious situation is that confronting the ambitious young man or woman, eager to get on in the world, who is unable to finish high school, or that of the ambitious and once hopeful high school graduate who, because of desperate financial limitations, may be unable to round out his education by attending a so-called institution of higher learning. I have met and talked with such young people as they stand frustrated on the very threshold of a fuller life. Denied further schooling and unable to get a job because of their youth or lack of proper training, they face the future despairingly or with an apathy resulting from a broken spirit.

The educational system of this country cannot

safely ignore its responsibility to these young men and women. More and more they will have to be provided for in the educational program of every school. Cultural and vocational courses will have to be given with a view to helping these young men and women to find themselves, to prepare themselves for a vocation, or to bridge the interval between school and a job or more school.

Then there is another class of individuals who need the attention of the schools. A large group of persons, many of them fathers and mothers, have been tossed about by the economic hurricane until they are now derelict. Some of them have given up hope, while others have become vicious in their feeling toward a system that has permitted this catastrophe.

Keeping Children Physically Fit

The largest part of the task of redeeming this battered human wreckage and restoring it to happiness and usefulness properly belongs to the schools. They have at their disposal the means for doing this work—where they haven't, the means must be provided—and they have a personnel trained in the requisite technique. Some of these persons must be helped to reintegrate themselves, to find themselves in new interests; others must learn new vocations; still others must learn to understand the implications of the social and economic metamorphosis that is taking place.

Medical and dental attention provided for children in some school systems is inadequate. Society must recognize that it owes it to the child to see that he has every reasonable opportunity to possess a healthy body, sound teeth, good eyesight and all physical prerequisites to his complete enjoyment of life. Schools of the new era must provide properly trained specialists so that corrections can be made before the child passes beyond the probability of successful treatment. It is far less costly to keep a child physically fit than it is to maintain institutions to care for the products of neglected childhood.

How are we going to be able to afford such schools and such services? It is true that some communities that are now deeply in debt may be unable to afford them for some time to come. It should be possible, however, for most school systems to make their money go much farther by making more continuous use of their school plants. One of the necessary requirements of the power age is what Stuart Chase calls "capacity operation of the industrial and social plant, on the balanced load principle." May not this principle be applied to schools as well as to industrial plants, transportation and similar activities? If that is done, I prophesy that we shall obtain sufficient money to provide many of the educational services I have described. More and more the principles of maximum plant utilization so well known to the engineer will have to be applied to the operation of the school. The really successful educator of the new era will be a social engineer. Under such conditions, it appears likely that an enlightened people will be glad to bear the increased cost of a really enlightened education.

The problems confronting the schools of the nation in adjusting their charges to the new era are particularly close to the Department of the Interior. Secretary Ickes, who has repeatedly indicated by word and action a deep and abiding interest in the work of the schools, said in addressing the National Education Association:

"No nation in these times can hope to survive, to say nothing of progressing in the arts and the sciences, in commerce, in trade, or in industry, unless it is composed of a well educated citizenry. Least of all can a democracy, depending, as it must depend, upon an informed public opinion for the selection of its leaders and the framing of its laws, hope long to endure unless it consists of a highly and universally educated electorate. The individual American must be educated not only that he may be able to enjoy a happier and fuller life; he must be educated in order that, in cooperation with other educated Americans, he may do his part toward sustaining and upbuilding an intelligent and beneficent and capable government."

We Look to the Teaching Profession

No one realizes better than Secretary Ickes that the nation's expenditure of millions of dollars for recovery will be worse than useless unless it is accompanied by the development of an intelligent and honest people to live in this new order. This is preeminently the job of the schools. It will be their task to map out a program of reconstruction. I should like to see the educators set up in each state a Planning Commission on Education made up of educators, engineers and experts in long range city and regional planning. Something of this kind is now being done by the Tennessee Valley Authority. Here for the first time educators, agricultural and industrial experts, city and regional planners, are working together to develop conditions that will provide a richer and more complete life for the people of this region.

In our attempt to emerge from the machine age into the power age with intelligent understanding, we look to the teaching profession not only for the great and unselfish service it has rendered in the past, but also for the vision and the dynamic leadership that will be needed to carry on and make permanent the readjustments now in process.

Closer Unity Is Needed Between Educational Organizations

By F. B. ANDREEN
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There is no dearth of professional groups that purport to speak for and represent the interests of education, but there is a lack of correlation and coordination between them. What is needed today, believes Mr. Andreen, is an interrelated and integrated educational association of national scope to which all other educational organizations in the country are subsidiary and supporting parts

SOCIAL progress is dependent upon well defined, worth while programs that are carried out by the enthusiasm and effort of effectively organized groups. The profession of education is the sponsor of the greatest and most far-reaching socializing agency known to man. Yet the influence that education as a profession exerts over its own practices and life in general today is limited by deficiencies inherent in its own organization.

Education has all the essentials of and opportunities for effective organization. It sponsors a recognized need; the universality of its appeal captivates the interest of many persons; its contacts reach into every nook and corner of the land; it embraces a special group of highly intelligent individuals.

These factors are the groundwork of a powerful organization. But there is no such organization in the profession of education. Whatever organization there is is loose and disjointed. Sincere and devout individuals are grouped together into the National Education Association, a number of educational fraternities, councils of school executives, state educational associations, and classroom teacher groups. But there is no warp (common organization) that runs from the bottom (individual teacher) to the top (national association headquarters of all teachers) and from the top to the bottom. Neither are there strands of woof (organizations of every type of educational work) that tie into the work of the organization.

What is needed today is an interrelated and integrated educational association of national scope to which all other educational organizations are subsidiary and supporting parts. Membership in state, divisional and local educational associations should be based upon membership in the national association, which should also be coupled with membership in departmental organization (subject matter field or administrative grouping). Its membership should include the president of the largest university as well as the humblest backwoods teacher. One annual fee should be collected for membership in both the national association and subsidiary groupings. Such unity would encourage the rank and file of educators to make articulate in the councils of the profession their ideas, feelings and contributions for the advancement of the profession, and when from such councils a program or policy is evolved, the machinery for putting the program into effect should be ready for concerted action in national, state and local spheres.

More Money Is Needed

The financial support that teachers have given their professional organizations has been niggardly and spasmodic, not at all in keeping with the dignity and importance of the profession and the need for improving its practices and enlarging its results. Educational associations in the field today work with thousands of dollars while those associations that are the spokesmen of other interests, not as important as education and often opposed to it, work with millions of dollars.

Under the present conditions of American life money is a prime necessity for influencing public opinion. Money is required to rent the avenues of communication, whether they be the radio, the

press or the public platform. Secretarial help, stationery and stamps are required if the membership is to be informed of the developments of a broad educational program and the individual obligation of each member for its advancement. Sufficient money has never been available in the coffers of educational associations to make efficient coordination possible. This has been due mainly to lack of loyalty and solidarity among teachers and their consequent failure to provide funds to support the common interest.

All They Do Is Pay Their Dues

The expressman who delivers packages to my office receives a salary of $17.50 a week. He pays $12 a year to the organization that functions in behalf of his interests. Railway clerks pay $15 annual membership fees to the Union of Railway Brotherhoods. Medical, dental and legal professional membership fees range from $15 to $50, depending upon the particular group within the profession with which the individual is classed. Contrast these specific instances with the usual financial support given by teachers to their professional associations. No vocational or professional group, with the exception of the clergy, has been so niggardly with financial support of its professional organization as has the profession of education.

Organizations are ineffective not only because financial support is lacking but also because teachers have no opportunity for active participation. About the only activities in which 99 per cent of the educational profession ever participate is the payment of an annual state association membership fee—and even this slight participation may be prompted by pressure from the superintendent rather than by a genuine interest in the professional organization—and attendance at a district or state convention. Such participation does not challenge the interest and intelligence of the average individual.

Not Organized for Action

Every graded school system, every county group of rural teachers, and every state college, university and city school system should have its own local organization, to which officers are elected every year. Every member with talent should be given an opportunity to hold office in such a local organization, carrying consequent responsibilities and representing it in larger divisional groups. This may seem inconsequential, but it would give a greater number of teachers an opportunity to come in contact with the functioning of the professional organization. By changing officers yearly this opportunity for teachers to come into direct contact with the functioning of the professional organization would be enlarged. Such action would build esprit de corps and solidarity in the profession and give individual members of the profession an opportunity for democratic participation in building policies.

The aspirations and needs of education are constantly thwarted because of the lack of coordinate and effective action by the profession. Groups purporting to speak for the profession have time and again suggested the imperative need for a federal department of education with a secretary in the President's cabinet. Yet legislative accomplishment is just as far from realization as it was a quarter of a century ago, not because the logic to support the national need is lacking but because efforts to get congressional action on the matter have always been sporadic and scattered instead of persistent and unified.

This is just one of numerous instances of failure of the profession to accomplish its ends because it is not organized for deliberate, persistent, purposeful and influential action. That educators throughout the country are awakening to this fact is indicated by the significant action of the Department of Superintendence at its recent meeting in Cleveland, covered in the following resolution.

An Important Resolution

"The time has come for more effective organization, in order to bring to the attention of the citizens of this country the imperative necessity of providing for the education of the rising generation. The department, therefore, declares itself committed to a reorganization of its working relations to all other educational forces of the nation to the end that the national heritage of youth, a useful education, shall not perish."

This resolution indicates that a strong and representative group of educators realize that everything is not what it ought to be with respect to the type, nature and workings of professional organizations. There is no dearth of professional groups that purport to speak for and represent the interests of education, but there is a lack of correlation and coordination between them. There is nothing to tie them together in a compact whole. It is true that at times all these organizations work in harmony to accomplish the same ends. But such support is rather sporadic and incidental, depending not upon direct effort at unified and cooperative action but upon voluntary, hit-or-miss "muddling," usually the result of some desperate emergency. No wonder the profession is far behind other professions and vocational groups in the effectiveness with which it controls its own practices and influences public opinion.

It is becoming more and more difficult to accomplish any social or economic readjustment without the aid of a powerful and effective organization. This has been realized by labor, veterans, industrial, manufacturing, credit and banking groups and other professions and organizations. During the past year organized labor has increased its membership 400 per cent and has realized a corresponding increase in its influence to the extent that it practically dictated the labor terms that went into the NRA codes. The NRA has unified, strengthened the influence and coordinated the efforts of every group connected with industry and manufacturing. Results obtained by effective medical and law organizations, both in control of their respective professional practices and in their relationship to the public, are likewise well known. When a medical or a law fraternity asks any state legislature for the enactment of a certain law, it is enacted without much hesitation.

The Evil of False Idealism

No doubt considerable hesitation in changing our methods of influencing the public in behalf of education through organized action is due to a false idealism which permeates the profession. Many persons engaged in educational work feel that education is so high and noble a type of public service that its dignity would be lowered by exerting organized pressure on legislative assemblies and urging public support for measures to improve the effectiveness of the profession.

Rather than adopt the aggressive technique of other groups, who ask and demand consideration of their rights, educational groups choose to come before legislatures and the public as mendicants begging for favors. Is it any wonder that educators are thought of as impractical and the profession of education as a "weak sister" among other professions? The American people admire strength in a fighting force as well as high ideals. They respond effectively when they are made aware of needs and purposes. The strength of the profession of education, however, has never been manifested, and other interests have crowded it from radio broadcasts, the press and the platform to such an extent that its needs and purposes are only vaguely known to the public.

The need for concerted action is evident on every hand. The need for a strong, unified organization as a national spokesman for education is the central theme of discussions among both teachers and administrators. If the race between catastrophe and education is to result in the latter's favor, a more dominant organization must rise from the ashes of those organizations that are in existence at the present time.

Health Education Prepares Pupils for Later Life

"It is more important to prepare for life and living than for the mere making of a living," declares Dr. James F. Rogers, U. S. Office of Education specialist in health education, in stressing the need for more hygiene and health instruction in high schools throughout the United States.

The average high school gives little attention to the study of health Doctor Rogers points out, but in a few states progress has been made. In New Mexico, physiology and hygiene is a required subject in high school. In Alabama it must be taught to girls. In Ohio one unit of the sixteen required for graduation may be earned in this subject, and in Pennsylvania it is a requirement in the program approved by the state department of education.

In a new Office of Education publication, "Health Instruction in Grades 9-12," Doctor Rogers says there is no reason why suitable health instruction should not be provided for high school pupils. Pupils in the last two years of high school range from fifteen to twenty years of age. They have matured. There are things they want and need to know and ought to know. It is the time to present this information.

Teaching health will be more effective, Doctor Rogers' study suggests, if the instruction is not incidental to any other subject, and if the teacher is well qualified.

The pamphlet traces the struggle of hygiene for a place in the high school program, and presents an outline of the present courses of study and suggestions for coordination and correlation of health work.

A course in physiology, hygiene and public health should be limited to essentials and should never be allowed to develop into courses for prospective specialists in these fields, says Doctor Rogers.

Credit for hygiene is now given by at least thirty-six colleges and universities.

Public Education Throughout the World

The principle of public education supported by taxation now applies in theory at least to most of mankind. Only five of the world's sixty-seven official nations, Abyssinia, Arabia, Bhutan, Monaco and Nepal, may not subscribe to the principle, according to James F. Abel, foreign education specialist, U. S. Office of Education.

Doctor Abel's summary, prepared in answer to a recent request: "List the nations without public schools supported by taxation," reveals that even Abyssinia and Nepal use some public monies for education, and Monaco has good schools.

Moreover, nearly all colonies, protectorates, dependencies and other political divisions not commonly termed "national" have public school systems. India had public schools 120 years ago. In 1931 her schools had more than twelve million pupils enrolled.

The French, Japanese and Italian governments seek to develop educational systems suited to the indigenous peoples of the colonies. Greenland, the only colony of Denmark, has good schools.

The territorial boundaries of public education have expanded until they include most of the inhabited areas throughout the world.

In Defense of School Boards

By FRED ENGELHARDT
Professor of School Administration, University of Minnesota

BECAUSE Dr. C. H. Judd in his article in the February issue of The NATION'S SCHOOLS holds that school boards should be abolished is no reason why such a step should be taken. It is indeed odd that those who have stood for scientific development in education are willing to remove school boards from the picture without an adequate substitute plan, without sufficient evidence to justify their claims, and with one sweep of the hand.

In the first place I question whether a "vigorous campaign for the abolition of all boards of education" would have the support of "all friends of American schools," and, in the second place, whether the outcome of such a step would be in the interest of public education. At the present time the most enthusiastic supporters of the proposed movement would probably be the mayors, the city councils and the local politicians.

The general indictment of school boards contained in this article is unfair, prejudiced and not founded on fact. If evidence were carefully collected and analyzed, I believe the results would show that school boards as a whole have done exceedingly well during these trying years. Likewise I believe that the evidence would reveal at least as many cases in which school boards have acted heroically to save public education as there are instances in which their actions were indifferent or cowardly. I contend that if professional leaders in schools had been required to face the period 1930-34 without the assistance of lay school boards, the status of public education in the United States might be much worse than it is today.

Contradictory Statements

Doctor Judd fails to present facts to support his contentions, and the generalizations he sets forth are in one or two instances contradictory. For example, he holds that professional opinion is often overridden and that "new members of boards of education frequently enter upon their duties inspired by a zeal for reform born of the profoundest ignorance and conceit." At the same time he holds that "They [boards of education] usually come from the conservative levels of society and insist on perpetuating traditional practices because of their blindness to educational needs. . . ."

It is hoped that public services will eventually be operated under the leadership of professionally trained executives. Yet when this day comes there will continue to be a place in democracy for the lay citizen on legislative boards and councils. Schools will always operate in a social medium in which the public has a vital interest. Is it possible to conceive of an increasingly enlightened people living in this country as years go by and yet presume for a moment that their financial support can be solicited while their profound interests in public education are ignored?

Public Support Essential

It is accepted that professional qualifications for educational workers must be improved. An impartial study of local school administration will reveal many cases in which schools have suffered because professional leadership has failed and in which the outcome has been unjustly charged to the board of education. Many a blunder of the superintendent has been kept from public exposure through the wise action of a level-headed school board. There have been occasions when professional leadership has been most grateful because the board of education, acting as a buffer or as a balance wheel, has overridden untimely and poorly conceived demands of the professional staff. Educational leadership has not always been right. Often lay citizens, called into the councils of educational leaders, have expressed appropriate and sound judgment on school matters. The schools need the support of the public, and professional leaders in education cannot afford to carry on unless the public is represented in their council meetings.

The present plan of public school administration has many weaknesses. But it is unfair to place all the limitations at the door of the board of education. Many weak spots in public school organization and administration may be assigned to the professional leadership now in charge of schools. Progress has been made in past years. Greater progress may be made in the future if those who are interested in public school administration will study their problems more intensively, if the professional education of leaders is improved, and if sound principles are applied in creating the board of education and in developing the relationships between the board and the superintendent of schools.

What Others Have to Say . . . about federal subsidies

COMMISSIONER PAYSON SMITH, Massachusetts Department of Education:

The whole matter of federal aid for the support of education is so much in flux that I am frankly not able to reach a definite conclusion as to what the permanent policy should be. I am studying the question constantly. In general, I believe that some federal support of education will not only be desirable but may become necessary.

SUPT. C. ELMER ROBERTS, Emmett, Idaho:

I favor some federal support for public education. This support should naturally have some check and should be distributed in terms of a formula representing need. I believe the present system of state school systems is worth preserving. Idaho could finance at the present time a satisfactory program of education. Uniformity and standardization to a limited extent are desirable through federal support.

SUPT. EDWIN BROOME, Philadelphia:

I favor increasing federal support of education as a necessity and not as a principle, because I believe that for a considerable number of years, perhaps indefinitely, many communities will not on their own resources be able to give their children the equality of opportunity in education that was guaranteed by the Declaration of Independence.

As to the general principle of federal support of education, I would go so far as to agree that the federal government should subsidize education in certain communities under certain restricted conditions, for example, (1) that the community will maintain a program of education for all its children, which should not be inferior to a standard set by the federal government, and (2) that the community will present evidence to the federal government that it has made every reasonable effort to finance such a program and has failed through no fault of its own, such as the incompetence or dishonesty of local officials or an ineffective system of taxation.

As to the influence of the federal government in local education, this naturally will follow the added support, to the extent, at any rate, of sufficient supervision to make certain a program of education of high standard. Beyond this, I think both the support and the control of education should be a state function.

There is, of course, danger that subsidies from the federal government, if injudiciously applied, will tend to perpetuate wrong educational ideals and practices. In the emergency through which we are now passing, we must expect that result in many instances, but if federal aid is to become a permanent policy of the government it should be predicated upon a program of education worked out by representatives of the best thought in education throughout the country.

The federal aid that is needed just now is an emergency need and should be applied without regard to whether or not the school program has been sold to the community. The selling of the school program is a long job and requires the national, state and local school authorities in cooperation.

Uniformity of standards is undesirable beyond a minimum standard program, especially in a country that is as diversified as ours. There should be a wide field in which the local school system may have freedom in developing a program adapted to local needs.

DEAN SHELTON PHELPS, Peabody Graduate School:

I favor federal aid to American education when extended in the characteristic manner of earlier history. I favor pitiless publicity in regard to all administration of public funds. I do not favor a system of federal inspection and auditing.

Federal aid to education, under present trends and practices, is probably necessary. If handled as a subsidy given on the basis of effort-need, with its administration attended by complete publicity, the traditional inadequacy of school organization should be remedied. Such aid could be a means for accomplishing better publicity. Establishment of education as a state responsibility was a wise provision and should be preserved. If uniformity and standardization are desirable aims—I think they are not—then centralization is the effective means of achieving them. This would mean federalization.

The functions of the federal office of education in education should be advisory. This presupposes adequate research facilities. A review and reevaluation of state expenditures would, I believe, provide a satisfactory minimum offering in education in the state of Tennessee.

WALTER CROSBY EELLS, Stanford University:

It is high time for the adoption of a policy of federal support of education on an extensive scale. A government that spends millions for the improvement of corn, cotton and cattle should spend other millions for its children. Generous appropriations have gone into federal road building. Education is more important than transportation. As a result of these roads, and of the automobile, the press, the radio and other agencies, states are closer together now than counties were in the nineteenth century.

Migration of population has become an everyday matter. Of almost two thousand men and women listed in the last edition of "Who's Who in America" as residents of California, only one-fourth were born in the state. In Oregon only one-half are native, in Washington only one-seventh. The people of the Pacific Coast should be as desirous that those coming to their borders be well educated as that good schools be maintained for their own children.

The ability to support public education has always varied tremendously in the different states. It has only been accentuated by the present economic crisis. The federal government has acknowledged its responsibility for the physical well-being of youth in the Civilian Conservation Corps; but C. C. C. must also mean Cooperative Conservation of Children in a national sense.

The federal government is the only possible agency that can help to assure equalization of educational opportunity, not primarily for the sake of a single state, but for the welfare of all the children. The federal government may reduce the content of gold in the dollar. It must increase the content of the gold invested in the education of its youth. Economic necessity may drive us from the gold standard, but the necessity for preserving the educational standard is greater than ever before. The federal government must help.

Recentness—The Brass Idol of Textbook Selection

If the basic conceptions conveyed in a book have been replaced with newer ideas its continued use is indefensible. If, on the other hand, its data are essentially correct and it merely fails to report insignificant changes or additions to knowledge made since it was printed, it would be silly to replace it on such grounds.

By P. A. KNOWLTON
Editor, The Macmillan Company

FALSE gods are worshipped in every realm of life, including schoolbook publication. It is the business of educators to distinguish between sound ideals and false idols—between Jehovah and Baal.

Within reasonable limits it is the publisher's duty to do the same thing, but unhappily if he is to survive he must not only form his own estimates as to ultimate values in education, but when he sees idolatry triumphing over idealism he must make commercial concessions to idolatry. The difference between a conscientious and a mercenary educational publisher is chiefly one of emphasis. The former on every possible occasion makes the books he publishes conform to his opinions as to what books really ought to be. The other matches his wits against those of his fellow gamblers in educational fashions and tries to guess as often as possible what books—good, bad or indifferent—school people will buy most readily. But whether he is sincerely interested in educational values or not, every publisher must emphasize the commercial factor sufficiently to keep his organization out of the red if he can.

When Is a Book Obsolete?

This means that he must conform to teachers' demands. One of these demands, which has grown steadily from year to year, suffering perhaps a temporary set-back during the depression but certain to increase with any measure of recovery, is the demand for books carrying recent copyright dates. To satisfy it, the number of new publications must be largely increased.

The demand for new articles is a condition and not a theory, and regardless of who is responsible, it is here, apparently to stay. To what extent is it good and should it be complied with? To what extent is it detrimental to education and should it be opposed?

I do not decry a reasonable sensitiveness to the impropriety of teaching obsolete subject matter. I should not, for example, favor subscribing to the self-satisfaction of the British publisher who showed me with obvious pride in 1926 a geography of Europe, widely used in England, neither the text nor the maps of which had been altered since before the World War. I feel nothing but intellectual contempt when I cite the fact that a recent publisher's questionnaire revealed numerous cases of superintendents who boasted that they had not changed a single text in ten years, twelve years, or, in one case, sixteen years. Such a policy indicates a frank and cynical preference for safety in one's job rather than conscience in filling that job.

With flagrant obsoleteness of subject matter there can of course be no compromise. We should not forget, however, that subject matter becomes obsolete in different ways and at different rates of speed. Failure to recognize the significant events of a momentous year like 1933 means a real degree of obsoleteness in an American history, and it is a commonplace among schoolbook publishers that the appearance of a new census of the United States goes a long way toward invalidating the treatment of this country in geographies published during the preceding decade.

But even in the social studies the educational importance of last minute information can easily be overrated. Publishers of school geographies must of course correct their plates to show Gorki in place of Nijni Novgorod, and some of them will continue to use such petty corrections as talking points. I maintain, however, that Nijni Novgorod affords as good correlation with history as does

Gorki with literature, and that the failure of a book to recognize an arbitrary change of this kind within a few months after its occurrence is an unimportant trifle and ought to have no weight whatever in a comparative appraisal of rival books.

Even in the field of United States history, in commenting on the partial inadequacy of any book more than a year old, I do not refer primarily to its omission of a bald, necessarily perspectiveless final chapter recounting the events of the last year, which could easily be supplied by any teacher out of the latest World Almanac. Rather, I deplore in such a book the author's inability to reinterpret the events and movements of earlier periods in the light of all the social and political experience that has been crowded into the past twelve months. An astronomy that fails to mention the planet Pluto is scarcely less useful because of this omission; but a book on astrophysics antedating the theory of relativity would be worthless as a textbook today.

Market for New Books Is Limited

We must, then, use discrimination in condemning books as obsolete on the ground of outmoded subject matter. If the basic conceptions conveyed in a book have been replaced with newer ideas its continued use, except as a library exhibit in the history of human error, is indefensible. If, on the other hand, its data are essentially correct and it merely fails to report insignificant changes or additions to knowledge made since it was printed, it would be silly to replace it on such grounds.

Justice to those who demand recently published books compels me to state that ordinarily it is not subject matter but educational pattern that disqualifies a book. Nowadays it is possible for teachers and publishers to take all sorts of liberties with subject matter, but it simply will not do to be careless with methodology. If an activity enthusiast—and that is coming to mean the average teacher—is reminded that his unit program has left out big hunks of history or that his geography program teaches everything about France except what one would find if one went there, he assumes a grieved look and begins to pray for his critic's curricular and methodologic salvation.

The curriculum is a rapidly changing thing. With a really up-and-coming, thoroughly professional adopting committee, a book that fails to meet its chosen course of study is out of the running. Some 35,000 new courses of study were recently counted and that means that some 35,000 books or groups of books would be necessary were all the fastidious curricular tastes of the country to be satisfied. Manifestly not all of them can be satisfied. Nevertheless the tremendous variety of present day curricular demands in contrast with the curricular uniformity of one or two decades ago serves greatly to minimize the potential market for any new book. The demand for recent copyrights further limits the potential aggregate sale of any book. Such new books, then, as may be written and published represent to their authors and publishers opportunities to earn comparatively slender royalties and profits and to make a comparatively restricted contribution to education.

But this is a mere aside. What interests us about the changing curriculum is the fact that in fields of relatively static subject matter a new and authoritative curricular study, such for example as the report of the Classical Investigation published in 1924, disqualifies textbooks that antedate it just as truly as would changes in subject matter. But it should be noted that in fields where curricular changes are the only important changes the demand for a recent copyright is not justified except insofar as it tends to restrict the choice of books to those written after the publication of the last significant curricular study, however long ago that may have been.

The proper course, therefore, for an individual or a committee to pursue when responsible for the selection of textbooks is not, as in the case of one large Middle Western city that I have in mind, to rule out automatically all texts carrying a copyright date more than five years old, but to ask the following questions: (1) Is the subject matter of this text correct and modern in all essential respects? (2) Does this book in its main outline cover the ground that we want it to cover in the light of that particular curriculum that we accept as valid, whether made a month or a year or a decade ago? (3) Does it presuppose methods of teaching and conform to an educational philosophy that we accept? According to the nature of the subject matter and the educational creed of the person or group making the choice, the book selected may properly vary in age from an unpublished manuscript to an educational classic fifteen or twenty years old.

Books That Have Proved Their Value

To eliminate all except recently published books from basal use is to shut one's eyes in ignorance and arrogance to the fact that there are schoolbook classics just as there are classics of general literature and classics of music. A prominent music critic not long ago defined a classic as a production old enough to have demonstrated its permanent value. It would be sad indeed if the curricular unrest characteristic of American education today should blind teachers to the fact that there are such things as schoolbooks that have permanent or at least semipermanent value. British teachers

refuse to be stampeded by novelties, and their loyal adherence to books of proved value more than compensates for their complacency with respect to obsolete subject matter.

Not without reason, I think, are two books with which I happen to be familiar, best sellers on this side of the water—one an elementary school text in a comparatively abstruse field and the other a high school text in a subject notorious for its difficulty. Both books are twenty years old. They do not represent a publisher's stubbornness in sticking to his older wares. One has been revised only recently, and the original unrevised edition of each has always far exceeded in sales the revised edition; and, except upon request, I suspect that no samples of either book have been sent out for years. Every publisher of long standing with a list of considerable size has such books, and I think it would be a pity for schools to deny themselves these books because of a misguided opinion that continuing to use them would reflect upon their professional standing. On the contrary, a visitor at a book exhibit who turns up her nose at a Latin text because its copyright antedates the year 1933 ought to cultivate a sense of humor.

What effect has the demand for recent copyright dates upon the quality of schoolbooks?

It has one good effect: It tends to eliminate books that are obsolete either in subject matter or in form.

How Prices Are Affected

It has the following bad effects: (1) It shortens the lives and limits the distribution of good books and thereby reduces the incentive to write and publish really monumental works. The day is rapidly coming when this demand, coupled with the variety of curricular requirements, will favor the production of short-lived potboilers and discourage the production of textbook classics. (2) In always identifying newness with excellence, it tends to aggravate the harmful influence of unsound curricular demands. (To say that there are such unsound demands can hardly be attacked as heresy, for does not the production of new courses by the hundred and thousand imply that the specialists in curriculum research are themselves dissatisfied with the work of even their most recent predecessors?) (3) It places a carelessly written and solvenly new book at an unfair advantage over a somewhat older book of superior workmanship.

What is the effect of this demand upon the price of books? Frankly, this effect, though real, is not as great as might be feared, for tradition has prescribed maximum limits to schoolbook prices which, if exceeded, at once become prohibitive. The American public will pay about so much for an arithmetic or a history or a geography. Even if the probable demand is divided by two or five or ten, this traditional price cannot be exceeded by any large margin. In the event of such a reduction in schoolbook markets, this fact will serve greatly to diminish the number of newly published books having a high initial cost, but such books as are published will not be much more expensive than heretofore.

I have before me the publishing budget of a book published some time ago at a list price of $1.80. The cost of composition, illustrations and those other items that publishers call plate cost amounted to $6,700. Printed in 10,000 lots, the book was planned to pay out—that is, to pay the publisher a normal overhead and profit in addition to recovery of the plate cost—through a sale of 60,000 copies.

How Publishers Evade the Difficulty

Now let us see what the publisher's attitude would have been toward this same book had he estimated the aggregate market at 30,000 copies and had he felt it unsafe to print the book in larger editions than 5,000 copies. He would have had to price the book at $2.40. This price would have been prohibitive. He would therefore have been forced to do one of two things: Either he would have declined publication entirely as financially impossible, or he would have cheapened the book mechanically, probably at the same time printing it in speculatively large editions. Either way the schools would have been the losers, and probably also the publisher.

Another book with a plate cost of $4,800 was planned to pay out at a list price of $1.68 through the sale of 19,000 copies, with a first edition of 10,000 copies. Had it been necessary to print this book in editions of 5,000 copies and to predict an aggregate sale of only 10,000 copies, the list price of this book also would have had to be $2.40, which would have been prohibitive. These were high school books.

I have before me also the budget for an elementary school text having an initial cost of $2,850, planned to pay out at a list price of $1.12 through the sale of 18,500 copies. Had the probable life of this book been so reduced as to make it impossible to predict a sale of more than 10,000 copies, this price of $1.12, the maximum that the traffic will bear, would have had to be increased to $1.40. If we assume a general refusal to grant publishers and authors returns from any book after the first five years and begin to look upon it with disfavor as senescent when it is three years old, we are throwing many publishing enterprises, normally legitimate, into the class of unwarranted speculations. Some of the best books will never see the

light of day, others will be mechanically cheaper than they would otherwise have been, and the rest will be a little, but not materially, more expensive.

How do the publishers evade the difficulty? They do it, of course, by publishing revisions, real or alleged, that legalize the use of later copyright dates. These revisions vary all the way from fundamentally new books rewritten from cover to cover, reset and reillustrated, to books 90 or 95 per cent identical with the original product but corrected and supplemented just enough to get the book by with the copyright authorities in Washington. Even a nominal revision contains for the most part recent historic, geographic or scientific data, but it may or may not conform to curricular standards recently promulgated. In a city that taboos all books in their sixth year such a revision serves to meet formal requirements and hence to render even more silly taboos on copyright dates of a stated age.

So insistent, in fact, has the demand for recent copyright dates become that publishers resort to all sorts of subterfuges to disguise the fact that revisions are revisions. Some publishers have tried to stem the tide and have habitually included the dates of earlier copyrights on their copyright pages. Others have suppressed such earlier dates, a practice of doubtful legality, and, some think, of doubtful ethics. Still other publishers include the copyright dates of all editions, including the first, but give the chief emphasis in position and in size of type to the most recent date. The time has come when practically no publishers can afford to adopt the first of these three courses. Personally I should like to see the third become the standard procedure; but for the second—the suppression of older copyright dates—teachers in their unthinking insistence upon a requirement that is as often unsound as it is justified have only themselves to thank.

Allocating Federal Aid

An editorial published in the March, 1934, issue of the *National Municipal Review* comments as follows on federal aid for schools:

"Legislation has been introduced into the present Congress to provide aid for the suffering school system of the country. Conditions are critical in the world of education. On all hands we find schools closed, special departments such as kindergartens eliminated in schools that are open and teachers in vast numbers working without pay. The case for federal aid to the public schools is a strong one.

"The present bills provide for the allocation of federal grants or loans by the United States Commissioner of Education on the basis of relative need. So far, so good. There is talk, however, of impending changes to the bills which would force division of the money among the states on the basis of their school population. With this suggestion the *National Municipal Review* takes vigorous issue. If money is to be appropriated for the aid of education in this financial crisis, it should be spent where it is needed to keep the schools open. It would be the height of folly for the same proportion of funds to be allotted to Alabama, where approximately half the schools are still closed despite desperate efforts of a united citizenry to keep them open, and to New York State, which has had relatively little trouble.

"There are two other points to be considered here. Unconditional federal assistance would simply result in a freezing of the present wasteful administrative organization of the school systems of many states. If federal money is to be spent, it should not be spent without strings attached, strings which would make possible the elimination of millions of dollars in waste that is due to the small school district in many states.

"The second point to bear in mind is that schools are not the only local governmental service that have been hard hit by the depression. Read 'Our Starving Libraries,' by R. L. Duffus, to get a dramatic picture of what has been happening to the most important cultural service with which our civilization has provided adults. Or communicate with the American Public Health Association to learn of the abandonment of modern public health units which prevent disease that would take economic toll far beyond the small expenditure required for prevention. 'Public health is purchasable' has been the slogan of this group for many years. It is sad but true that we are no longer buying it. This is not to speak of the other services of local government; there are communities where police protection is breaking down due to a lack of money to meet pay rolls and renew or repair equipment. In city after city officers are riding motorcycles no longer fit for their purpose, and firemen are fighting fires with leaky hose and worn-out pumpers.

"These services, too, require federal consideration. The fact of the matter is that in many sections of the country local government has been breaking down, services that supply the very foundation of modern civilization are no longer being rendered, and something must be done and done quickly to protect such communities from complete disintegration. All the social and cultural services of local government are important and interdependent—take any one away and the effect may be unthinkable.

"It is time someone did some thinking and laid down some principles of federal aid to local governments. As a starter, these might be considered:

"1. Money should be allocated on the basis of need.

"2. Power should be given to a qualified administrative authority to lay down rules, regulations and requirements (both as to expenditure of funds and reorganization of existing machinery) on which the grant may be conditioned.

"3. All functions of local government should be given consideration in any program of federal aid."

In Case of Fire

As a part of the regular fire drill, pupils should be taught how to protect their heads and faces in case they are caught in a fire, the *Nebraska Educational Journal* points out. Here is a practical method: Throw one arm across the eyes with the hand pressed close to the side of the head. Press the other arm over the nose and mouth. If wearing a coat, blouse or dress with sleeves, the individual should press the sleeve far into his mouth, and hold it tightly between his teeth.

The cause of the child's slow progress should be determined. If he is found to be suffering from defective hearing or vision or any other physical defect, he should be referred to a physician. Lamp treatments are used in many schools to help to correct certain physical defects in children.

Helping the Mentally Retarded Child

By CHARLES SCOTT BERRY
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IT IS generally conceded that not less than 2 per cent of the pupils enrolled in the elementary grades are mentally retarded to such a degree that they require special education. Less than 15 per cent of these mentally retarded children are enrolled in special classes.[1]

The expense of the special class and the tremendous pressure for extreme economy in education make it improbable that in the near future a larger percentage of mentally handicapped children will be educated in the usual type of special class. However, it is not merely a choice between the usual special class on the one hand and failure and repetition in the regular grades on the other. There are other alternatives. Among them are the modified special class and the individual program.

In the education of the mentally retarded, what are the relative advantages and disadvantages of the usual type of special class, the modified special class and the individual program?

The special class is the large city method of providing a better type of education for the mentally retarded child. Pupils assigned to the special class are usually those with an intelligence quotient below 75 who have failed in the work of the regular grades. In other words, they represent the lowest 2 or 3 per cent of the school population in intelligence and school achievement. Few children who are put in a special class are ever returned to the regular grades. For them the special class is a finishing school. Usually this type of class is taught by a successful grade teacher who has had special

[1]White House Conference on Child Health and Protection, Special Education: The Handicapped and the Gifted, New York, The Century Company, 1931.

training for teaching mentally retarded children. Enrollment in the special class usually ranges from fifteen to twenty-five pupils, the number depending upon a variety of conditions such as grade range, age of pupils, degree of retardation and location of class.

As a means of educating the mentally retarded pupil, the special class has these advantages:

1. It fits into any type of school organization since it is a unit independent of the rest of the school. It requires no change in the duties of the regular grade teacher.
2. Since few children assigned to a special class are ever returned to the regular grades, the special class provides opportunity for the use of subject matter and methods of instruction best suited to the needs of the mentally retarded child.
3. It avoids duplication by making it unnecessary to have special equipment and supplementary textbooks for mentally retarded children in every grade room.
4. It simplifies placement and follow-up work since all mentally retarded children and their records are kept in one room.
5. It meets with the approval of the regular grade teachers since the most difficult cases are removed from the regular classroom.
6. It provides a more satisfactory environment for the mentally retarded child; in the special class he has the opportunity to associate with those with whom he can compete more successfully.
7. It places all mentally retarded children under the direction of a specially trained teacher.

The special class has certain disadvantages, among which are the following:

1. Children are seldom assigned to a special room until they have failed two or more times, thus convincing the teacher and principal that they are unable and never will be able to advance with the typical child.
2. An additional teacher is required, which increases the per capita cost of education.
3. It is difficult to secure the consent of parents to have their children placed in a special class because of a real or imagined social stigma.
4. The child is completely at the mercy of the special teacher since he usually takes all of his work under her instruction. There is danger that she may fail to discover his possibilities and keep him in the special class when he should be returned to the regular grades.
5. The special class usually deprives the mentally retarded child of the opportunity to compete with normal children in those activities in which he might compete successfully, for example, sports, games and manual activities.
6. The special class is usually so isolated from regular school activity that the grade teachers are not acquainted with the possibilities of the mentally retarded child and feel no responsibility for his growth and development.
7. There are few cities in which more than 2 per cent of elementary school children are found in special classes, although a much larger percentage of the elementary school population stands in need of training similar to that provided in the best special classes.

Usually in the rural district, village or small city the small number of mentally retarded children does not justify the formation of a special class if its membership is limited to the 2 per cent of the elementary school population who are lowest in intelligence and school achievement. Yet the need for some type of special education in small communities is just as great as it is in the large cities.

The special class, the modified special class and the individual program are the three methods of aiding the mentally retarded pupil. The latter two are particularly adaptable for use in small cities, villages and rural districts. Such special training provides satisfactory results at little or no additional cost

Children's teeth must be watched. They may be the cause of mental deficiency.

The modified special class is a means of providing special education in smaller communities where there are not enough children to justify organizing the usual type of special class. Its membership includes from 5 to 15 per cent of the elementary school enrollment instead of the 1 to 2 per cent found in the special class.

In any elementary school having a teacher for each of the first four grades, a modified special class could be organized by placing in Room A all mentally retarded children from Rooms B, C and D, at the same time taking out of Room A two children who are not retarded for every retarded child put in. Let us suppose that each of the four grade teachers had 40 pupils in her room. If each of three teachers sent 5 retarded pupils to Room A and each received 10 normal children from Room A in their place, there would be 25 pupils in Room A and 45 pupils in each of Rooms B, C and D.

In the special class all four grades would be represented and there would be enough pupils from each grade to make group work possible when desirable. In each of the other three rooms two grades would be represented, thirty-five pupils in one and ten in the other. Usually the most desirable arrangement would be for each teacher to have consecutive grades, that is, first and second, second and third, third and fourth.

The modified special class is an attempt to make more adequate provision for individual differences among school children by the recognition and utilization of individual differences among teachers. Even teachers with similar training and intelligence differ widely in temperament, interests and attitudes.

Every principal of long experience knows the type of teacher who is successful in teaching a well graded group of children but who has little interest in and no patience with the child who is unable to keep up with the group. On the other hand, the principal also knows the type of teacher whose primary interest is in the individual, not in the group; her concern is the child.

The child on the examination table is crippled. Correction of his defect should help him to progress better in school.

Why should not the teacher who finds her greatest success and satisfaction in teaching large, well graded groups of children be given such groups to teach? And why should not the teacher who is so keenly interested in the exceptional child be given such children to teach? To continue the traditional practice of assigning to each teacher the same number of pupils, regardless of individual differences in pupils and teachers, is to ignore all that has been learned in recent years about the social and educational significance of individual differences. Only through wise utilization of individual differences in teachers can provision most success-

fully be made for individual differences in pupils.

Instead of attempting to train all elementary teachers how to teach the handicapped, it would be wiser to start with the teacher who is most interested in the exceptional child. Give her the problem cases. Let her become the specialist in individual differences in her school and encourage her to secure the necessary special training.

Teacher Understands Her Pupils

The second principle involved in the organization of the modified special class is that the so-called typical teacher can more satisfactorily teach a wider range of subject matter to a large group of children who are closely similar in interests and ability than she can a narrower range of subject matter to a small, heterogeneous group of children. In other words, the average teacher will find it more satisfactory to teach the subject matter of two grades to a large group of typical children than to teach the subject matter of a single grade to a smaller group of children who represent the usual wide range of individual differences. This is due in part to the fact that in teacher training institutions much more emphasis is placed on a knowledge of a wide range of subject matter than on a knowledge of the wide range of individual differences found on any age or grade level.

Although the teacher has to teach pupils from two grades instead of one, she is teaching only pupils whom she understands. The difficulty of teaching a wider range of subject matter can be met successfully by following the plan suggested by Dunn[1] and by using brighter pupils as assistants.

Since the modified special class, unlike the special class in large cities, requires a rearrangement of the work in the early grades, the organization of such a class should not be attempted without the support and cooperation of the grade teachers.

The percentage of school children who belong in a modified special class varies; however, from 5 to 15 per cent of the pupils in the elementary grades would profit greatly from special education.

The modified special class has the following advantages over the special class:

1. It provides special education for a much larger percentage of mentally retarded children.
2. It costs less since an additional teacher is not required.
3. It meets with less opposition from parents since more pupils are eventually returned from this type of class to the regular grades.
4. Transfer to and from the modified special class is easier since most of the pupils belong to the same elementary school.
5. The modified special class can be organized in a school in which there are not enough seriously handicapped children to justify the usual type of special class.
6. The grade teacher is relieved not merely of some but of all mentally retarded pupils.

The modified special class has the following disadvantages as compared with the special class:

1. The special teacher has to provide for a wider range of individual differences.
2. The grade teacher will usually have to teach two grades instead of one, and a larger number of children.
3. If the work of the modified special class is to be successfully accomplished, the cooperation of the grade teachers is required.
4. The modified special class is seldom feasible where there is departmentalization of instruction in the early grades or semiannual promotion.
5. The principal or superintendent must know his teachers in order to select the right one for the modified special class.
6. The principal must be progressive enough to break with tradition in order that the handicapped children in his school may have better training and instruction. It is much easier for him to follow the traditional method or to insist that he must have a special class of the usual type.

Usually the superintendent or principal will find it advisable to devote a semester to the study of mental retardation in his school system before attempting to organize the special class. The number, age and grade distribution of mentally retarded pupils will need to be determined. Conferences should be held with the grade teachers in order to determine how to provide more adequate training for these children. Without the approval and support of the grade teachers the modified special class is rarely a success.

The Individual Program Method

The advisability of admitting to the modified special class pupils who are behind in their work because of illness or late entrance, as well as those who are mentally retarded, should be considered. As long as some children of average intelligence are in the room there will be little or no opposition from parents.

In connection with the organization of the modified special class, publicity is undesirable. The room should be named in a way that does not mark it off from the rest of the school.

The teacher of the modified special class should be a grade teacher who has shown by her work that she is greatly interested in the handicapped child. Her lack of special training is not sufficient reason for postponing the organization of the class.

[1]Dunn, Fannie W., and Everett, Marcia A., Four Years in a Country School, Teachers College, Columbia University, 1926.

The water tank has proved useful in helping correct certain physical defects in children that were the cause of their mental underdevelopment.

After teaching the class for a semester she will be ready and anxious for some special training which she can obtain during the summer. Twenty-five pupils should be the maximum number in the modified special class.

Two groups of children will be found in every modified special class. The first and smaller group is made up of those who can be returned to the regular grades after some special training. The second and larger group consists of those children who can never successfully keep up with children in the regular grades. They require special training throughout their school life. Upon reaching the junior high school age or the beginning of the adolescent period, they should be promoted into the junior high school building regardless of their grade standing. In the junior high school as in the early grades they should have a teacher who is genuinely interested in the individual child. No attempt should be made to follow the junior high school course of study. No matter what their training may be, most of these pupils, upon leaving school, will enter unskilled and semiskilled occupations. They should therefore be given the type of training in the shops and classroom that will enable them to be happy and successful.

In an elementary school where it does not seem feasible to have a modified special class, the individual program method may be used to good advantage. By means of this method the mentally retarded child who cannot accomplish all the work of his own age or grade group is not failed and required to repeat the work. Rather, he is passed with his group into the next grade, continuing his work there from the point he reached in the previous grade.[1] The individual program method enables the mentally retarded child to progress continuously through the grades, to remain with the same group of children as long as he is in the elementary school and to receive proper training.

This plan can be put into operation as follows: As soon as the first grade teacher, for example, discovers a child who is unable to do the work of the grade, she should report that fact to the principal and ask for assistance.

The cause or causes of the child's slow progress should then be determined. This is more difficult in the small community than in the large city where there is usually a clinic to which the child may be taken for examination. However, the teacher or

[1]The Department of Superintendence Ninth Yearbook, Feb. 1931, pp. 79-86.

principal can investigate home conditions, test the hearing and vision of the child and get a fair idea of his intelligence level by means of intelligence tests. If the child is found to be suffering from defective hearing or vision or from any other physical defect, he should be referred to the school nurse or to the school physician. If there is no school nurse or school physician, the parents should be urged to have the child examined by the family physician. If glasses are needed, or an operation or treatment is indicated for which the parents are unable to pay, appeal for assistance should be made to a service club, welfare organization or parent-teacher organization.

Brighter Children May Assist

If the child's slow progress is due to inferior capacity and not to physical defects, poor health or undesirable home environment, an individual program should be planned by the principal and the child's teacher. The child should not be hurried forward but should be allowed to travel at his own rate, mastering the fundamentals as he goes along. At the end of the school year he should pass with his group into the second grade room. The second grade teacher, with the assistance of the principal and the first grade teacher, should make out his program for the year. At the end of the second year he should pass into the third grade room and the third grade teacher, with the assistance of the principal and the second grade teacher, should arrange his program for the third year.

After spending six years in the elementary grades in the manner described, the mentally retarded child should pass with his group into the junior high school. If there are not enough mentally retarded children in the junior high school to form a modified special class, the mentally retarded child should sit with his own group. The principal of the junior high school, the child's home room teacher and the teachers with whom he will study should constitute his committee on program.

The teacher who has a sympathetic understanding of the mentally retarded child will interpret him in such a way that the other children in his room will treat him as older brothers and sisters treat the younger members of the family. The teacher's burden can be lightened by having the brighter children in the room assist the mentally retarded child in his play and in his work. If this plan is carried out consistently it will mean that the normal child will have a sympathetic understanding of the mentally handicapped child and that the latter will find school a joy.

The individual program has the following advantages over the modified special class:

1. It can be used in one-teacher rural schools as well as in small and large elementary schools.
2. It gives the normal child a sympathetic understanding of the mentally retarded child through their continued association under favorable conditions. It gives the mentally retarded child the opportunity to associate with normal children who have learned to understand him.
3. It meets with the approval of parents of mentally retarded children.
4. It gives every grade teacher a better understanding of the possibilities of the mentally retarded child.

The individual program has the following disadvantages over the modified special class:

1. It does not make use of individual differences in teachers.
2. It deprives the mentally retarded child of the satisfaction and stimulation that come from associating and competing with children of his own capacity.
3. The mentally retarded child is taught by teachers who have had no special training.

To what extent is educational provision for mentally retarded children being made by means of the special class, the modified special class and the individual program?

In the majority of the large cities less than 2 per cent of the total school population is enrolled in special classes for the mentally deficient (the lower grade mentally retarded) and the backward (the higher grade mentally retarded), although a much larger percentage of school children would profit greatly from training similar to that given in the special class.

Small Schools Neglect Special Training

The chief reason that more mentally retarded children are not in special classes is the greater cost of special education. Semiannual promotions and departmentalization of instruction, which are characteristic of large school systems, make it difficult to organize a special class without adding another teacher.

In large cities little use is made of the modified special class or of the individual program, although the latter especially could be used to good advantage in small outlying schools.

In small cities, villages and rural districts little is being done to provide special education for mentally handicapped children. Occasionally a special class is organized at the price of an additional teacher. The modified special class and individual program are seldom attempted. Yet by means of the modified special class and the individual program, small communities and rural districts could provide satisfactory training for most mentally retarded children at little or no additional cost.

The Editor Looks at School Publicity

Editors of fifty newspapers in cities of from 30,000 to 200,000 population were interviewed with regard to their attitude toward school publicity. Three types of school publicity —athletics, public meetings and entertainments, and human interest stories—were considered in the survey

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EXPERT testimony from all quarters indicates that schools depend upon the press for public support in the same manner, if not to the same degree, as do amusements, society, art and literature, political and economic issues, religious and social reform.

Most studies of school publicity have been made from the standpoint of the school. The study to be described here was conducted in order to ascertain at first hand the attitude of editors of leading daily newspapers toward school publicity. School men must understand this attitude before they can take full advantage of their opportunities for publicity.

The data for this study were secured principally by means of personal interviews with editors of fifty daily newspapers in twelve North Central and Eastern states. Half of the editors were in cities of more than 200,000 population, while the rest were almost equally distributed between cities of less than 30,000 and cities of between 30,000 and 200,000. Though a question form was employed for interviewing editors, much incidental conversation occurred and many of the comments were taken in shorthand.

To economize time and serve editorial convenience, publicity was divided into three types: school athletics, public meetings and entertainments, and human interest stories. Although school athletics is an important division of school publicity as judged by item count, the editor is inclined to view it as sports news and not as school news. A number of editors, therefore, without regard for educational considerations, play up individual excellence more than team excellence. They justify this practice by the claim that considerable mention is necessary in order to make an account interesting and to keep reports of games from becoming monotonous. A few editors report that they have been asked, particularly by athletic coaches, to limit publicity concerning stars. Practically all editors have their own reporters cover training sessions and games, but about forty of the fifty also receive sports news from pupils, coaches or other members of the school personnel. On the whole there is little contact between school men and news men regarding the writing or editing of news about school athletics.

Newspapers liberally publicize entertainments and public gatherings in connection with schools and school organizations. Forty-nine of the fifty editors throw open their columns free of charge for such publicity. Few of the editors expect paid advertisements to supplement the free publicity they give to profit-making ventures conducted by the schools, and those who do expect it generally fail to get it. Typical comment is that the schools are unable to pay for advertising. Sometimes the schools are not quite fair. One editor who does not expect paid advertising stated that the local schools use his columns free to publicize their entertainments, and then have their window cards for additional publicity printed by an establishment that does job printing.

School Page Is Growing in Favor

Human interest stories about schools and school people feature children, teachers, other school employees and members of auxiliary agencies such as parent groups, with or without illustrations. Forty-four editors considered such stories valuable in keeping the schools before the public, but three did not agree with them. The popular impression that such material is run as filler is disclaimed by most editors. They declare that human interest stories are real news. Children are generally considered

the best subjects for human interest stories, but one large Ohio paper has run a series of such articles on school principals at regular intervals.

Ninety per cent of the fifty papers have a policy of covering the school offices, and in addition about one-third advocate the employment of student reporters. Many editors admit they do not cover the school offices regularly. A school page is favored by half the editors. The school page is evidently growing in favor. Its existence usually means the assignment of someone on the newspaper staff as school editor.

The great majority of editors are satisfied with their existing arrangements for school publicity. Dissatisfaction is confined to the larger cities. Critical comment centers around a dictatorial attitude on the part of school officers, failure of school people to talk in news language, concealment of certain news, lack of confidence in the press, and partiality shown at times to certain papers in release of news. Helpful comment suggests use of more space, daily contact and frankness with the public.

Superintendent Should Grant Interviews

The editors report that school men try to meet them personally except in the largest cities. Superintendents appear interested in the handling of school news by the papers, especially news that is favorable to the schools. It is a common practice for superintendents to request editors to suppress unfavorable news. Most editors say it is their policy to consult the superintendent before publishing school scandal, but fewer would do so before publishing a critical editorial.

Nearly all papers publish editorials on school topics, though the total number of these is small. Half the editors say they have been requested to write or publish editorials on school topics by school or lay groups or both. The majority are willing to accede to these requests unless the material conflicts with the policy of the paper. It appears wise for all school men to maintain close contact with the papers in order that they may be in a better position to prevent the publication of scandal and to secure a maximum of editorial support. Requests for editorials on school matters need to be properly limited, however, both as to nature and to amount of material.

Except in smaller cities, editors believe that the newspaper is a factor in molding public opinion. Some believe that newspapers should mold public opinion, but that they are failing to do so. Others modestly aver that they know too little about the public schools to express themselves safely. One says that his newspaper is not a crusader, but that the public should be left free to form its own opinions. Another says that his paper is ahead of the schools themselves, and that it often forms public opinion on school matters. Inasmuch as two-thirds of the editors consider it their function to form public opinion, it is highly essential that school men provide editors with adequate information on school matters.

Rather than employ a school press agent, the superintendent should make himself always available for interview, he should give news liberally, and he should study ways to make himself proficient in this regard. This function of publicity is too vital to be delegated to a subordinate.

Parallel to the editorial interviews, a study was made of the number of news items concerning schools in order to obtain a rough idea of the attention given school news in the papers whose editors were interviewed. Twelve issues of each of the fifty papers were chosen and carefully examined. This study of the number and character of items concerning schools was an interesting check on the material supplied by the interviews. For example, one editor stated emphatically that his paper does not publish scandal concerning the schools, although the latest issue of his paper displayed on the front page a story about the arrest of some high school pupils.

One-third of all school items have to do with athletics. If school people do not wish this phase to take the limelight, they must provide proper material of another character. The item count shows that it is easier to put school publicity on the front page in small cities than in large cities. Papers in larger cities lead the smaller ones in graphic school news and in number of editorials on school matters. Unfavorable editorials are more frequent in large city dailies than in papers published in small cities.

The average editor has a personality worth knowing. He has served in many capacities on newspapers and knows his business thoroughly. He is a broad-minded individual. He has lived in more than one community. He has met many school men. He feels the pulse of the entire community. He is interested in many things and education is by all means one of them.

The Cost of Textbooks

Minneapolis public schools own nearly one million dollars worth of library books and textbooks, according to the Minneapolis School Bulletin. Expenditures for textbooks have been low for a number of years compared with other cities. The average cost of books per pupil in the Minneapolis elementary schools during the years 1926 to 1931 was $1.09, as compared with $1.54 in seventeen of the largest cities organized on the 6-3-3 plan.

Teachers Must Be More Than Teachers

By CALVIN T. RYAN
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MODERN school systems are so intricately organized that the failure of any one part endangers the success of all other parts. The intricacy varies, obviously, according to the size of the system, nevertheless, the one-teacher school is a part of a state system, and the teacher so employed has no less a responsibility than the teacher employed in an urban system.

With the modern stress on specialization, teachers in training are likely to feel that they are going to be teachers of special subjects or grades only, and are going to function as part of the school as a whole. The total objectives of education cannot be served when teachers take that attitude. No principal can have smooth running machinery if his teachers think of themselves as being primarily and solely teachers of this or that subject or grade, and regard him as being the school system in the abstract. Teachers should feel themselves first of all as part of the school system in which they are employed and should accept a measure of responsibility for the success or the failure of the school as a whole. Each teacher should be a sharer of the burdens common to the whole. Moreover, each teacher should know that if the grade teacher, for instance, fails, then the whole school has been weakened.

To acquire this sense of belonging, this esprit de corps, is as much a part of teacher training as the acquisition of methods or subject matter. This being so, the institution the purpose of which is to train teachers must provide for such activities and such projects as will give teachers in training a chance to sense what is meant by working cooperatively, and a chance to practice working with larger units than a class or a subject.

The point of view of the teacher is, from the nature of her work, different from that of the superintendent or the principal. These officials have to see the school as an integrated whole. Much of

These fifth and sixth grade girls are making costumes for the operetta. A student teacher is in charge.

their work is impersonal and mechanical, whereas that of the classroom teacher is personal and alive. In the light of these differences, and in the light of the difference in their preparation and experience, the classroom teacher and the superintendent may inadvertently work at odds. Whenever they do, the school suffers. There must be integration of effort before there can be integration of accomplishments.

Training Must Approach Actual School Situations

Teachers in training can get some understanding of the difference in the point of view, some understanding of why the superintendent looks at matters from the point of view of the whole, through activities involving wholes rather than parts. Such activities will mean that the student teacher will have to work with not one supervisor, but with several. She may have to consult the superintendent, the principal, the head of some college department: she may have to go into the community and visit business men and parents.

Unless teacher training approaches actual school situations the student teacher is not going to profit from it as much as she should. Unless it involves more than classroom procedure and methods of teaching this or that subject, again the student is not being adequately trained for actual school situations. An understanding of school as a whole should be part of every teacher's experience.

According to superintendents, teachers of special subjects, such as music, art and physical education, are the chief sinners in feeling their exemption from the responsibility of the success of the school as a whole.

At State Teachers College, Kearney, Neb., the aim is to give student teachers experience not only in handling classes and subjects, but also in handling projects that relate to the school as a whole and to the community. This experience comes as a part of their student teaching. Last winter, to use a specific illustration, we planned and carried out such an activity in the A. O. Thomas Elementary School, one of the laboratory schools connected with the college. The plan was originally conceived by the director of the laboratory school. He in turn suggested the plan to the music supervisor, who acted as general manager of the activity.

The plan centered around an operetta. The music supervisor chose "At the Rainbow's Edge," an operetta in which children from the kindergarten to the sixth grade could be used. Furthermore, the activity involved all the critic teachers, student teachers and supervisors in these grades, as well as such special teachers as those in speech and drama, physical education and art. In the end it involved the English, speech, home economics, industrial education, physical education, music, and art departments of the college.

Work on the operetta became projects for the fifth and sixth grades. For instance, the girls from these grades made the costumes; the boys made the scenery. The sixth grade wrote news stories for the daily paper and the college weekly and looked after the publicity. An instructor from the college English department gave a unit of work in journalism to this class which culminated in the news items about the operetta.

The music supervisor was the general manager of the activity. She worked through various committees composed of grade supervisors, cadets and student teachers, as well as heads of college departments. Each supervisor in the laboratory school had a delegated task. In the carrying out of this task, the supervisor could get assistance wherever she thought it appropriate to ask for it.

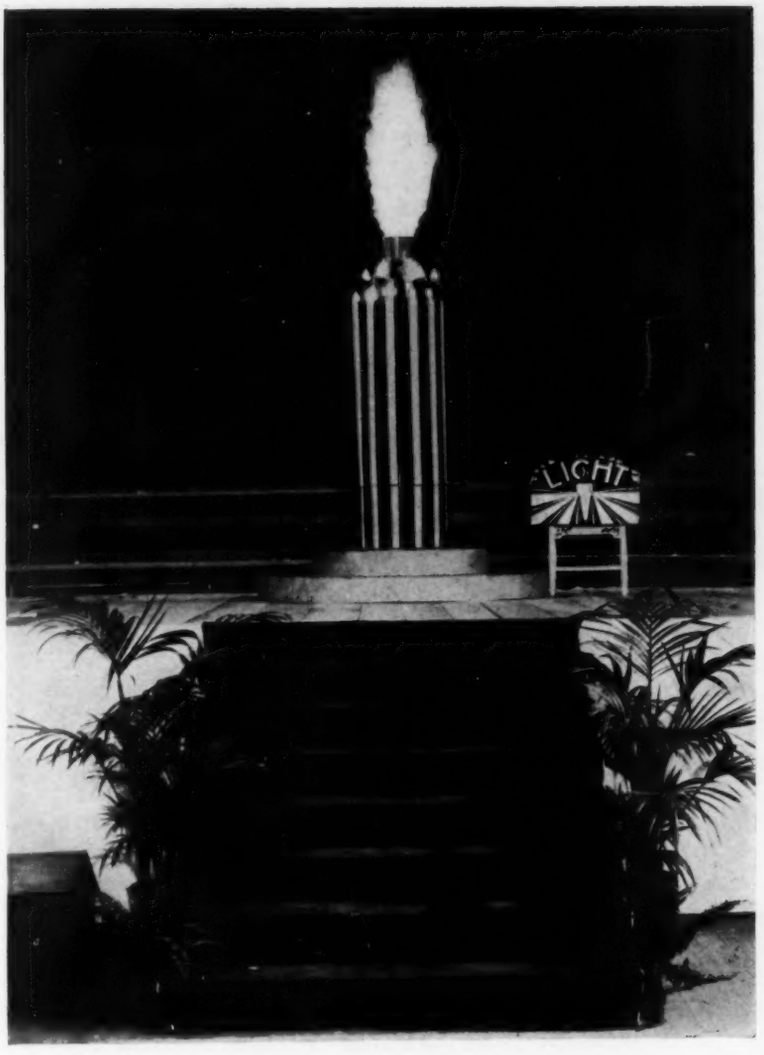
One objection that has been made to the project method is that too frequently it sinks the individual under the group. I do not believe this occurred with our operetta. At least the plans were made with the idea of avoiding any sacrifice of either the pupils or the student teachers.

As for the student teachers, they were given parts in which they were generally already interested. No particular stress was put upon this division of labor, however, for teachers in training should learn that in teaching one often must do things in which one is not directly interested.

A Challenge to Training Institutions

The college departments assisted wherever they were needed. The teacher of sewing assisted the girls with the making of costumes. The head of the industrial education department worked with his student teachers and the boys in their hobby class in building the scenery. The teacher of girls' physical education directed the dances. The teacher of speech and drama assumed responsibility for the interpretation of the lines and for the lighting effects. The head of the English department gave a unit of work in journalism in the sixth grade and guided the class in writing the news stories. The head of the art department looked after the painting of the posters.

Now of all times the teacher who can do nothing but teach a class is handicapped in either getting or holding a position. School officials are not employing many teachers of special subjects, certainly not in the smaller school systems. As a consequence, they want teachers of special subjects or grades who can handle projects that relate to the whole school. Naturally these officials look to the specially delegated teacher training institutions for adequately prepared teachers.



"The Torch of Education" was the theme used by the class of 1933, portraying education as a never dying flame. As each pupil stepped out to deliver his speech he presented a small torch to the class president who placed it in position on the side of the large torch.

Pupils and Parents Liked This Commencement

By G. W. KIRN
Superintendent of Schools, Council Bluffs, Iowa

IN ORDER to justify its existence, the commencement exercise should make some significant functional contribution to high school life. If the program is merely a perfunctory recognition of the closing of the school year or an opportunity to pass out diplomas to deserving graduates, the effort put into it is sheer waste and the presentation is an empty farce.

High school commencements have varied with the traditions of schools. The processional has ranged from an informal taking of seats set apart for the members of the class to the stately and beautiful processional march. The *pièce de résistance* of the program has usually been a speech by some more or less prominent adult. It has been endured in bored silence by members of the graduating class and tolerated by doting parents and relatives as a necessary prelude to the more important event—the pupils' getting their diplomas.

In the past when pupils did the talking on commencement programs the material was usually academic or so far removed from the experience and understanding of adolescent youth as to appear irrelevant and presumptuous. How, then, shall a commencement program be planned to carry out the idealism of a school?

The faculty and pupils of the Abraham Lincoln High School, Council Bluffs, Iowa, have set up certain standards to guide them in the planning of a commencement exercise. First and foremost, they decreed that all activity should be focused

The class of 1932 chose as its theme, "We Build." This program described the objectives of education. The arch was selected as a symbol. Each pupil brought to the platform the representation of a cut stone for constructing the arch.

around the members of the graduating class. The exercise should be dignified and beautiful. It should strive to vitalize the school career of every pupil and should offer an incentive for his continuing with his class until his graduation.

It should consist entirely of the work of members of the graduating class, both in preparation and presentation, and it should represent the combined activity of every department of the school. It should present in a captivating, dramatic, spectacular way the objectives of secondary education. It should arouse interest and give definite information in order to enlist the generous cooperation of the community. It should portray the extra-curricular program in its correlation with the curriculum as a progressive program of child development. It should serve as a means of expressing the appreciation of the members of the class to the community for the privileges they have enjoyed in the years they have spent in an institution of public education.

In conformity with these ideals the school has developed a type of commencement exercise that has become traditional. The processional is the stately "Pilgrims' Chorus" from Wagner's "Tannhäuser." Not that there is any special virtue in the selection of this particular processional, but the repetition of this classic music year after year serves as a connecting bond between members of the class and all recent graduates.

Caps and gowns have never been used since this custom tends to destroy individuality and to make the pupil merely a unit in a group. The boys wear their customary dark suits. The girls wear inexpensive white dresses and carry bouquets of roses. All members of the graduating class are seated on the platform on raised seats so that each is in plain view, the cynosure of the eyes of his parents, relatives and friends.

This arrangement, while important from the standpoint of a graduate-centered commencement, has certain drawbacks. It makes impossible the pageant form of exercise or one demanding a background, scenery and other properties. It necessitates a program that can be given in front of the seated class on a restricted portion of the platform. Properties and equipment must be such that they can be put into permanent position before the exercise begins or easily moved into position at the appropriate time. Brief descriptions of the three most recent commencement programs may be of value to schools with similar objectives.

The class of 1931 used as its graduating theme, "The Book." The program was an attempt to describe the component elements of the curriculum. Its purpose was to discuss in schematic fashion the changes in emphasis that have been occurring historically in each department, to sketch the present curricular program and to show what part it plays in fulfilling the general objectives of the school. Committees of seniors and faculty members outlined topics of interest and planned the program. The obvious was avoided and elements of interest and appeal were emphasized.

Pupils were selected for participation who had done superior work in these departments and who not only knew intimately the significance of the activity but also represented by the quality of their work and their general attitudes the spirit of the department. Fifteen speakers were chosen. Many

suggested plans were discarded because of impracticability of design or manipulation. The plan finally accepted called for a huge book, nine feet high and twelve feet wide when opened. Boys from the manual training department made this book. Members from the fine arts classes decorated each page with a large initial illuminated letter followed by the opening sentences of the speech. One page was set aside for each talk.

"We Build"

Upon the night of commencement the lights of the auditorium were dimmed and the book was illumined by spotlights. Small pages in costume turned the leaves as each participant described in a three-minute speech the work of the department in which he excelled. So the graduates gave their conceptions of history, mathematics, science, literature, speech, dramatics, languages, health education, commercial subjects, household arts, manual arts, drafting, music, fine arts and vocational guidance, as they occupied the focus of attention of the audience. There was no boredom because each pupil felt vitally responsible for the success of the program. Parents and patrons felt that they were acquiring an intimate knowledge of the work of the school.

Encouraged by the manifest interest and rapt attention of the graduating class and the attending crowd at the 1931 exercises, the class of 1932 decided to present a similar program involving some other significant aspect of the school. This class chose as its theme, "We Build." This program was a description of the objectives of public education. The plan was to show the specific objectives of education in this particular school in relationship with the more general objectives, and to describe how the school was attempting therewith to develop character and strong ethical personality.

The arch was selected as a symbol. As each pupil came to the platform for his part he brought with him the representation of a cut stone, made to appear like marble. Each stone was put in place in the arch by the master builder, the president of the class. The two sides were built alternately, the quality on the left representing the physical element, the one on the right its spiritual counterpart. As the arch was being constructed scaffolding was built up unostentatiously to facilitate the laying of the stones. The class used the paired objectives of health and honor, scholarship and the dignity of work, vocations and courage, citizenship and service, achievement and beauty, leadership and ideals, friendship and reverence. The quality of character was used as a keystone to unite the arch. Upon this arch was then set a pediment so that the whole structure was a replica of the front door of the school building. Spotlights were used to focus attention during the building. As each pupil received his diploma from the president of the board of education, he stood framed in the arch before stepping through to resume his seat, an allegorical representation of his entrance into society.

The class of 1933 used the theme, "The Torch of Education," portraying education as a never dying flame passed on from generation to generation. The specific plan was to show the contribution of the extracurricular program in maintaining and replenishing the flame. A huge torch was built in modern style. A regulating gas flame fed the torch and controlled its size. Each speaker carried a small torch, electrically lighted, to represent the part played by his activity in fulfilling the objectives of the school. As each pupil stepped out to deliver his speech, he presented the small torch to the president of the class, who placed it in position on the side of the large torch. Thus its light beautified and embellished the main shaft of the torch. As each new element was added, the flame representing the spirit of education increased in size. The pupils in this manner described the place in education of the home room, school assemblies, publications, clubs, literary societies, dramatics, forensics, vocal music, instrumental music, boys' athletics, girls' athletics, the R. O. T. C., character organizations, the honor society and finer appreciations. In the light of this torch the graduates received their diplomas.

Pupils, Teachers and Patrons Are Pleased

This type of pupil-centered commencement challenges the ingenuity and imagination of members of the graduating class, thus providing a fitting climax to their high school careers. It is within the scope and capacity of the participants. It enlists the interest and enthusiasm of all members of the class since there are few who do not have a part in the planning of the program, the preparation of the speeches or the building or decorating of the symbol. It enlists the work of all departments and is in a true sense an all-school function.

It has built up an engrossing interest in high school activities on the part of parents and patrons, and has given them an intelligent conception of what the school is attempting to do. The largest auditorium in the city is generally crowded nearly an hour before the ceremony and thousands are turned away. The program is beautiful, dignified and spectacular enough to maintain sustained attention throughout. There seems to be no desire on the part of pupils, teachers or patrons to revert to the more conventional plan of commencement program.

Why Not a Sane Character Education Curriculum?

By R. L. HUNT
Superintendent of Schools, Madison, S. D.

CHARACTER education has been repeatedly brought before teachers through numerous magazine articles, books, speakers at state and national meetings, and in two of the recent year books of allied organizations of the National Education Association. School systems have developed courses of study in this field in amazing numbers. Yet few seem to know where they are going or what they are accomplishing.

Studies have been made to determine the relation between intelligence and behavior, to observe and test pupil reactions to situations, to decide the best method of approach, and even to measure the amount of honesty, loyalty and other characteristics an individual possesses. Attempts have been made to determine fundamental character traits and the best way to present them to pupils. Statisticians have tried to apply formulas to individuals as they have done in mathematics and other subjects. What has been the result? Apparently general disagreement among educators and a confused group of classroom teachers.

Is it not a wiser policy for those responsible for the training of public school pupils to admit that individuals cannot be treated like combinations in mathematics? Subjective data should be accepted as evidence in the field of character education and more actual guidance work done.

Character Cannot Be Measured

Measurement of character is a misnomer. Only the pupil's reaction to certain situations can be measured or judged. It is true that a standard nomenclature has not been produced in character education. It is also true that the teacher's personality is of even more importance in citizenship training than in many other phases of her work. Perhaps definite measurement in this field is not possible. But are these sufficient reasons for condemning the whole procedure?

Recent steps taken by the government indicate a need for standards in business dealings. Surely schools have a responsibility in training youth so that there will be no need for a repetition of the present methods and policies of the government. World conditions indicate a failure along these lines in schools, for at least a part of the responsibility must be placed upon schools.

The problem of what and how to teach is still before educational leaders. If a definite curriculum is needed in other fields of instruction, there should be little argument against a curriculum in character education. Incidental teaching has been criticized because it can result only in accidental learning. The importance of having a modern curriculum has been emphasized in recent years. The challenge is as great in the character education program. It is true that every teacher worthy of the name teaches character, or rather exemplifies character, in all her teaching and her actions. But if she can do a better job of teaching mathematics or language with a well prepared curriculum, where is the logic of claiming that a curriculum is not needed in helping to develop better citizens?

In spite of all the research done in the field of character education, the aims have not been clearly stated, an analysis of the literature indicates. The objectives of character education include development of personality, development of socially minded and responsible personalities and ability to make sound moral judgments. But when an attempt is made to express the aims in concise statements the investigator becomes confused.

Immediate Action Is Needed

Why not settle down to a few simple policies and present the classroom teacher with a simple outline of the fundamental things needed for character training, give her suggestions for presenting them and cease worrying her over the scientific aspects of the curriculum. Immediate action is needed.

My suggestions may be summed up as follows: (1) Give the teacher a list of the fundamental aims of character education; (2) provide her with a few suggestions for approaching the subject; (3) select the traits that are commonly accepted as essential; (4) provide a list of situations for developing desirable traits; (5) use some form of a measuring scale for judging the pupils' reactions without reminding the teachers that subjective data are taboo.

This may sound rather philosophical but such a plan has worked and is working in many schools today. Teachers become more conscious of their responsibility in character building; they accept this field of instruction as a part of their work; they analyze the needs of each individual and group, and they proceed to place the emphasis where it is most needed in citizenship training.

Am I a Good Superintendent?

It's difficult for a superintendent, no matter how long he may have served his community, to ascertain exactly what opinion his board members have of him. Mr. Heidelberg wanted an honest answer to this question and so he asked each member of his board to fill in and return unsigned a rating sheet. The results, he says, were surprising and yet gratifying

By H. B. HEIDELBERG
Superintendent of Schools, Clarksdale, Miss.

IT IS essential that there exist between the superintendent and the school board a relationship of honesty, sincerity, frankness and confidence.

No matter how long a superintendent may have served in his position, he is never quite certain from the general impressions which he receives from his school board members what are their individual estimates of him. Nor does the board member usually stop to analyze the good qualities and faults of the superintendent in making an estimate of him. Friendship or personal dislike too frequently dominate a board member's judgment of the superintendent and influence his official attitude towards him.

It is important for several reasons that the superintendent ascertain rather accurately and by reliable means the opinions of the several members of the school board regarding his good qualities and his faults, (1) so that he may continue to justify their opinions of his good qualities; (2) that he may be warned of their recognition of his faults, as they see them, and (3) that he may endeavor to correct these faults and thus improve his efficiency and standing with the board.

A superintendent should never assume that he is in permanent good standing with his school board merely because his period of service is lengthy. The personnel of the school board changes, and likewise the attitude of the individual members of the board is subject to change at any time.

During the early fall of 1933 I prepared a written communication to the members of my school board, requesting that they rate me individually on an objective and impersonal basis, according to a rating sheet attached to the communication, which gave specific directions for their guidance. It was explained that after being filled out the rating sheets were to be delivered unsigned to the secretary, who would, in turn, deliver them, including his own rating sheet, in a sealed envelope to the superintendent. Thus the authorship of each rating was concealed, and perfect frankness and honesty of judgment were assured.

Following is the communication that was sent to each member of the school board.

Communication to the Board

"To the Members of the Clarksdale School Board:

"The September, 1933, number of the *American School Board Journal*, contains a one-page article on 'How School Board Presidents See the Superintendent of Schools.' This article is the result of communications received from 351 school board presidents in answer to an inquiry regarding the community faults and personal faults of school superintendents whom they have known, and the essential qualifications for success of a school superintendent, as they conceive them to be.

"The successful superintendent should constantly go through a process of self-criticism, self-appraisal and self-improvement. In order to do this, he needs not only to be introspective and self-critical, but, likewise, he needs to have, from an impersonal and objective viewpoint, the judgment of his friends and of those who are in a position to observe his faults and his good qualities.

"I value your judgment, not only as school board members, but also as citizens and friends who know me, and I should like to procure the benefit of your observations of my faults, as well as your judgment of me, as measured by the 'Essential Qualifications for Success' listed in the article, in order that I may see myself as others see me and endeavor to correct, so far as I can, my faults as seen by others.

"I have listed on the attached sheet the 'Com-

munity Faults' and the 'Personal Faults' of many superintendents.

"I have also listed in the order of rank, as given in the article, the 'Essential Qualifications for Success.' After each qualification I have placed the words, 'High,' 'Medium' and 'Low' to represent your judgment of me, as your school superintendent. Please draw a line under the word which best represents your opinion of how well I measure up to each of the thirteen qualifications listed.

"In order that you may feel perfectly free to express frankly your impersonal opinion and in order that I may not have the slightest degree of irritation toward any one of you who may give honest and sincere expression to his or her own views, I suggest that you merely check those faults which apply to me, and grade my qualifications, as indicated, without signing your name to this expression of your opinion. Then deliver this rating sheet representing your judgment to the secretary of the board, and he will deliver them to me when they have all been received. . . .

"I shall appreciate your cooperation in thus helping me to see myself as others see me, in order that I may be better able to correct my faults and, at the same time, be encouraged by your expressions of approval of those good qualities which you may think that I possess.

"Very sincerely yours,

"H. B. Heidelberg, Superintendent."

Following is the rating sheet that was given to each member of the school board.

The Rating Sheet

Please check any of the following community and personal faults which, in your judgment, are possessed by the superintendent:

Community Faults

Too much afraid of criticism to take a stand on important issues; lack of interest and activity in civic and religious affairs of the community; seeks public favor too much; declines to enter into the social life of the community; not careful and thoughtful in accepting social associates; takes part in community functions not approved by a majority of the patrons; spends too much time in community activities.

Personal Faults

Too egotistical; lacks tact in dealing with patrons and others; seeks favor of those whom he considers prominent in the community; talks too much in a "confidential way" with patrons and others; fails too often to control temper; negligent; lazy; unprogressive; impervious to new ideas and helpful suggestions; dodges issues; evades official responsibility; insincere, at times; oversensitive.

Please underscore that one of the words, "High," "Medium" or "Low" which represents your judgment concerning the extent to which the superintendent has each of the following qualifications:

Qualifications	*Rating*		
Business ability.	High	Medium	Low
Ability to select and recommend strong teachers.	High	Medium	Low
Ability to supervise.	High	Medium	Low
Strong and pleasing personality (aggressive, friendly, congenial).	High	Medium	Low
Cooperative and loyal (to board, teachers, school and community).	High	Medium	Low
Initiative ability (to plan for future).	High	Medium	Low
Strong disciplinarian.	High	Medium	Low
Maintains a strong publicity program for the schools.	High	Medium	Low
Thorough student and scholar.	High	Medium	Low
Fair and just.	High	Medium	Low
Tactful.	High	Medium	Low
Ability to keep out of local affairs.	High	Medium	Low
Keeps board well informed on school affairs.	High	Medium	Low

The following results were, in part, surprising and yet gratifying:

Each board member followed the directions exactly as requested.

It was evident from the ratings that they were made carefully, discriminatingly and honestly.

The superintendent found that he evidently had a fault of being "oversensitive," which he did not realize that he possessed, since two members rated him as being "oversensitive."

Under the head of "Community Faults," there was complete unanimity of agreement.

Under the head of "Personal Faults," there was unanimity of judgment on seven faults out of ten.

On the thirteen general qualifications listed at the bottom of the rating sheet there was unanimity of opinion on eight.

On each of the qualifications, "Business administrative ability," "Fair and just," and "Keeps board well informed on school affairs," there were four identical ratings and one different rating.

On the qualifications, "Maintains a strong publicity program for the schools" and "Tactful," three board members were in accord on their ratings and two were in accord on a different rating.

The superintendent received the satisfaction of knowing the exact opinion of each member of the board on an impersonal and objective basis and had the opportunity to correct his faults.

Legal Responsibility for Accidental Injuries to School Pupils

By M. M. CHAMBERS
Honorary Fellow, Ohio State University

A SEVEN-YEAR-OLD Texas boy fell from a school bus in such a way that the rear wheel passed over his head and killed him instantly. The vehicle was driven by the school principal who was under contract to perform this service regularly for $25 a month. He had covenanted to "use every care and precaution in the way of protecting the children transported, and to maintain order and discipline at all times, and to treat the children kindly and impartially." He was under a $2,000 surety bond to guarantee faithful performance.

The child's parents sued the principal for $4,100 damages and the surety company for the amount of the bond. The jury returned the answer "yes" to the specific question of whether the principal had exercised the degree of care for the safety of the child which his contract required. Judgment was entered for both defendants and later affirmed by the Court of Civil Appeals.[1]

Although there was evidence that the vehicle was of too small capacity and was not in good repair, responsibility for these matters rested upon the school trustees rather than upon the principal. The evidence indicated that the principal had carefully loaded the pupils and instructed them not to move about while the bus was in motion, and there was no good reason to suppose he could have foreseen or prevented the accident.

An Interesting California Case

The school trustees were not made parties to the suit and no question of liability of the district or of the trustees personally was presented. The rule of immunity for public corporations engaged in a governmental activity, which prevails generally, would protect the district, and it is doubtful that the trustees would be held personally liable, despite the inadequacy and disrepair of the bus.

The net result is that the aggrieved parents are uncompensated. As society becomes more humane, more stringent regulations governing the capacity and safety of school conveyances, and probably a growth of statutory imposition of pecuniary liability upon school districts in this class of cases may be expected.

A California case exhibits an unusual and interesting set of facts. Suit was brought against a number of joint defendants, including the school district and the teacher of shop work in the junior high school. Joint plaintiffs were a twelve-year-old boy and his mother. A part of the paraphernalia of the shop work department was a partially dismantled 1918 model truck, dangerous and defective in numerous respects.

On a trip made in this truck a makeshift electrical connection accidentally came into contact with the person of the boy who was driving, shocking him severely and causing him to lose control of the vehicle which ran off the road and down an embankment. The plaintiff pupil, riding on the truck, was thrown off and severely injured. There was a verdict and judgment for $3,613.30 for the plaintiffs and against both defendants. On appeal, this judgment was affirmed as to the defendant teacher and reversed as to the defendant school district.[2]

Teacher and Boys Were Trespassers

The district escaped liability although different sections of the California statutes provide: (1) that public agencies may be sued for damages "resulting from the dangerous or defective condition of public . . . property . . ."; (2) that a school district shall be liable for damages caused by a motor vehicle owned by it and negligently operated by "its officer, agent or employee when acting within the scope of his . . . employment," and (3) that a school district shall be liable for "any judgment against the district on account of injury to any pupil arising because of the negligence of the district, or its officers or employees."

The teacher was not acting within the scope of his employment, and he and the boys were trespassers in the unauthorized use of the truck; hence his negligence cannot be imputed to his employer. Furthermore, public liability for damages caused by defective and dangerous public property is limited to cases involving its ordinary use.

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[1]Lewis v. Halbert, (Tex. Civ. App.), 67 S. W. (2d) 430 (Dec. 15, 1933).

[2]Woodman v. Hemet Union High School District et al., (Cal. App.), 29 Pac. (2d) 257 (Feb. 1, 1934).

Happy To Say—

IT IS curious how contempt affects you at different times of your life. I don't recall suffering from any until I was twenty-three and had been schoolmastering a year. Our village president appointed a citizens' committee to investigate whether we should pave the main street. About twenty alleged leading citizens were named, but not I, though I was superintendent of schools. Nothing in my life up to then had mortified me so much. It depressed me for weeks. It does now, as I think of it, forty-eight years afterward. I ought to have gone to the president and told him that the superintendency, not I, but the office, should be honored. It would have benefited the town.

GENERAL WASHINGTON returned to General Howe the letter addressed "G. Washington, Esq." not because the American commander cared for himself, but for the dignity of his country. American educators, according to that same Washington and also to Madison, Monroe, Franklin and the statesmen of the founding days, were to be considered as "a certain and vital desideratum," "as of primary importance."

WHOSE fault is it that they have not universally been so considered? It is the public's fault. The people and their representatives, the school board, have often allowed schoolmasters and teachers to be considered anything but of primary importance.

FOR five years after my first mortification I got more and more of it until I believed my calling was contemptible. At length I got a good place in the passenger department of a great railroad. Country papers in my territory recorded my presence in their towns as visits of "a railway official," subordinate enough though I was. Mingling with men of many occupations, I learned that a great deal of the contempt I fancied as felt for school people was imaginary. Business men spoke of many of their former teachers, even men, and showed respect and affection.

AFTER two years under a general passenger agent who was good to me, a chance came to get back into teaching. I grabbed it. Never since have I felt contempt for this employment.

I HAVE known contemptible schoolmasters, but I doubt if they are more numerous than contemptible lawyers, physicians, ministers.

A TIP for the schoolmaster when addressing the public: Don't arouse contempt for us by talking pedagese: "environment," "along those lines," "on the part of the pupil," "the student body," "questionnaire," "personnel," or "the child." Speak the language of your audience. If they have to translate you, they lose much of you. Words that call attention to themselves are like a singer with too much face powder.

Wm McAndrew

THE SCHOOL PLANT

State Funds Help to Build a Modern Consolidated School

By T. C. HOLY
Ohio State University, and
J. H. MULLENIX
Superintendent, Warren Consolidated Schools,
Tiltonsville, Ohio

THE Ohio General Assembly at its regular session in 1929 appropriated, in addition to the regular subsidy for educational equalization, an additional million dollars for each year of the biennium which might be used for school plant rehabilitation in the 700 districts qualifying for state aid.

Plant rehabilitation was interpreted to include sites, new buildings, additions, repairs and equipment. Of this sum of $2,000,000 which might be used for this purpose during the years 1929 and 1930, $1,653,124 was either expended or obligated for plant rehabilitation in the state-aid school districts of Ohio.

As a part of the general school building survey made in connection with the distribution of this fund by the state department of education, a careful study was made of the schools of Warren Township, Jefferson County. As a result of this study, the department of education recommended to the state controlling board a subsidy of $20,000. This recommendation was approved on July 15, 1929, to be applied on a new six-year high school to accommodate an enrollment of approximately 300 pupils.

One of the conditions of this offer of $20,000 from the state to apply on this building, however, was the creation of a new school district, to consist of the village of Tiltonsville, the Warrenton Special School District and the remaining part of Warren Township outside of these two special districts. It was further stated in the proposal that the village of Yorkville, which is contiguous to the village of Tiltonsville, should ultimately become a part of this district. A further condition was that at the November, 1929, election the district should vote the additional bonds necessary to carry out this project.

At the August, 1929, meeting of the Jefferson County board of education, this new school district was created under the name of the Warren Consolidated School District, composed of the three districts already enumerated. This combination made a district with a population of more than 5,000, a school enrollment of some 1,500, and an assessed valuation of approximately $5,000,000. Prior to the consolidation, two high schools had been maintained—one at Tiltonsville with an en-

rollment of 125; the other, a three-year high school with an enrollment of thirty-three pupils, in the village of Rayland, which likewise adjoins the village of Tiltonsville. This then was the first step in the consolidation of the schools of this township.

The next step was the submission of bonds as provided in the proposal made by the state department of education and approved by the state controlling board. Due, however, to some dissension that arose as a result of the consolidation of the three districts, the new board of education thought it unwise to submit the bond issue at the 1929 election. It was their belief that the better policy would be to spend the first year in unifying the different elements in the district and in showing the need for a new high school building for the district. To that end the parent-teacher association, the churches, the press and other civic organizations cooperated. The school year 1929-30 was thus spent in solidifying the district. At the end of that year the board of education decided that the sentiment was such that the bond issue might be submitted at the November, 1930, election.

In the meantime, the state department had made some changes in its proposal, increasing the subsidy from $20,000 to $22,000. The architects had estimated that $162,000 would be required, so the district submitted an issue of $140,000 to the electors at the November, 1930, election. That the year spent in unifying the district had been successful was evidenced by the fact that this bond issue received 871 votes for and 378 against.

The bonds were sold and plans were under preparation when the question of the location of the building came before the board of education. Strangely enough, thus far little mention had been made of the location of the building. When the matter formally came before the board, a sharp difference of opinion was at once evident. Three members stood for a location outside the village of Tiltonsville, while the two members from this village favored a site within the village. Although a number of sites were suggested, only two were seriously considered.

Since another condition in the offer made by the state department of education was that the location, plans and equipment for the building must be approved by that department, the board of education asked the department to make a recommendation with reference to location. A representative of the state department of education was delegated to make this visit. A careful study was made of the residence location of the pupils, distances, desirability of sites proposed, relative cost and other factors pertinent to the problem.

On the basis of these data, it was recommended that the site within the village of Tiltonsville be purchased. This site contained ten acres. Two members favored this and two opposed it, which left the decision to the president. Other complications arose and the same representative of the state department of education made another visit, at which time the original data were checked and consideration was given to the claims of the two factions. The original recommendation for the Tiltonsville site was reaffirmed. Political pressure

The sewing room is well lighted and contains the necessary equipment for instruction purposes.

The physical and chemical laboratory is on the third floor. It is completely equipped in the modern manner.

from every conceivable source was then brought to bear on the situation. Finally in February, 1931, the board purchased this site for $9,800.

In the meantime the personnel of the county board of education had changed since the consolidation, a majority of the new membership being opposed to consolidation. Those residents of that part of the district opposed to the location of the building on the site purchased by the board circulated a petition asking that they be transferred to an adjoining district. This transfer, which took half of the valuation of the district and three members of the local board of education, was made by the county board of education at its March, 1931, meeting.

Acting on the advice of the state department of education, the local board of education sought an injunction based on an Ohio Supreme Court decision to the effect that a board of education, having once undertaken a project, should be given opportunity to complete it without interference from another body having jurisdiction. A temporary restraining order was given to the board, the hearing on which did not come up until the following September. As a result of this hearing, the judge in a rather lengthy decision made the temporary restraining order permanent. The case was appealed to the circuit court, which sustained the lower court so the opponents did not carry the case further. This hearing was held in October, 1931, or nearly a year after the bond issue had been voted and more than two years after the district had been first consolidated.

With this litigation settled, the board proceeded to complete its plans and submitted them to the department of education for approval. This was done and bids were sought. The letting was set for twelve o'clock on November 26, 1931. At exactly eleven o'clock on that date the county sheriff served notice that a temporary restraining order had been granted to the faction of the district opposed to the location of the building on the ground that the board was erecting a building larger than was needed and was therefore guilty of unwise use of its authority. This resulted in another delay. At the hearing which came shortly thereafter this restraining order was dissolved. Chiefly because of the cost involved in appeal, the case was not carried further.

On December 12, 1931, thirteen months after the bonds were voted and thirty months after the consolidation was first effected, the erection of the building was actually started. The building was formally dedicated on October 20, 1932, a little more than three years after the first steps in the consolidation.

The only redeeming feature in this long drawn out litigation, which at times engendered bitter feelings, was the fact that had the building been erected in 1929, as originally planned, it would

have cost the district about $20,000 more. The actual cost figures were as follows:

Site	$ 9,800.00
General Contract	92,334.90
Heating and Ventilating Contract	15,800.00
Plumbing and Vacuum Cleaning Contract	7,709.35
Sewage Disposal System	2,104.00
Equipment	20,590.84
Total	$148,339.09

Although this figure is approximately $14,000 less than the $162,000 originally planned to be expended for the building, more equipment was purchased than had been originally planned. It is safe to say that the delay in the erection of the building resulted in a saving to the taxpayers of about $20,000 in construction costs. This was partially offset by the legal costs, part of which were defrayed by public funds and the remainder by public-spirited citizens in the school district.

This school is a three-story building with a stage gymnasium. Since a considerable number of pupils come from the country, a good sized cafeteria with a separate kitchen is provided on the first floor. This room is well lighted and so equipped that it can be used for regular classroom purposes. It is connected with the sewing room, which is also used for cafeteria purposes. The building is planned so that future additions can be made at either end without seriously interfering with any of the rooms. Separate corridors leading to the gymnasium make it possible for groups on the stage to leave without having to go through the auditorium.

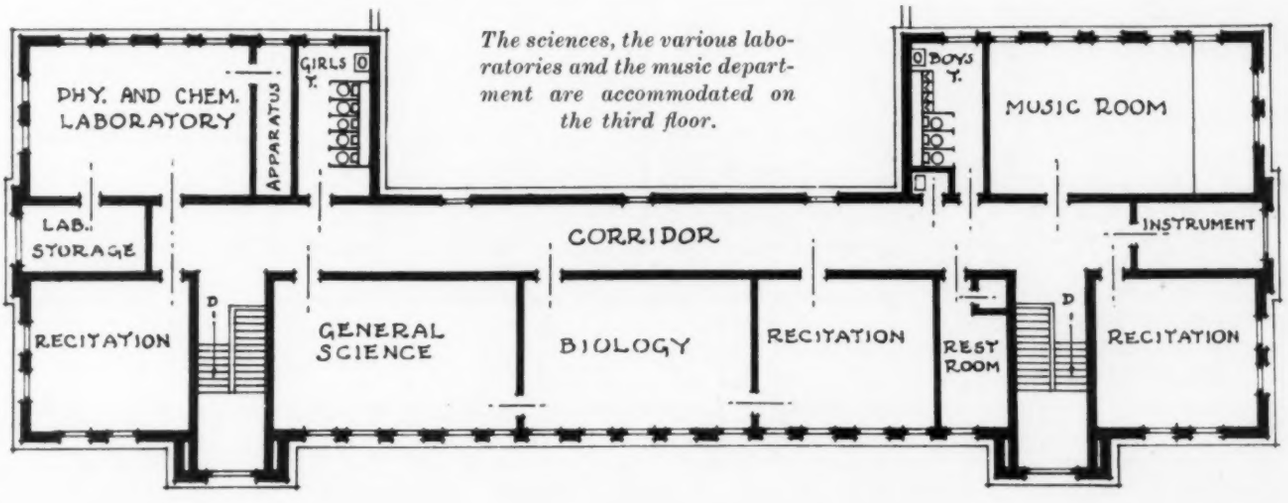
The number and kind of rooms provided were based on an analysis of a typical high school program for an enrollment of this size. In order to get the maximum utility, special rooms wherever possible were equipped for multiple use. For instance, all three laboratories can be used for other purposes. The building has been in use since September, 1932, and is completely satisfactory.

Warren Consolidated High School—The Architect's Story

By F. S. RUSK
Architect, Columbus, Ohio

THE site of the Warren Consolidated High School is practically level. The high school property contains ten acres with a frontage of approximately 450 feet on the main street and extends to the Ohio River on the east, a distance of about 970 feet. This ground is situated on the elevated flats bordering the river, between the tall ranges of hills in the Ohio Valley.

Only a limited number of shrubs and small evergreens have been planted, but plans are completed for developing the grounds to a point required for a building and site of this size and style. The necessary drives and approaches, entrance for school busses, athletic field including football gridiron, baseball diamond, running tracks, stadium seats and parking space have been completed in the spacious area between the building and the Ohio River on the east. The grounds and approaches are



The sciences, the various laboratories and the music department are accommodated on the third floor.

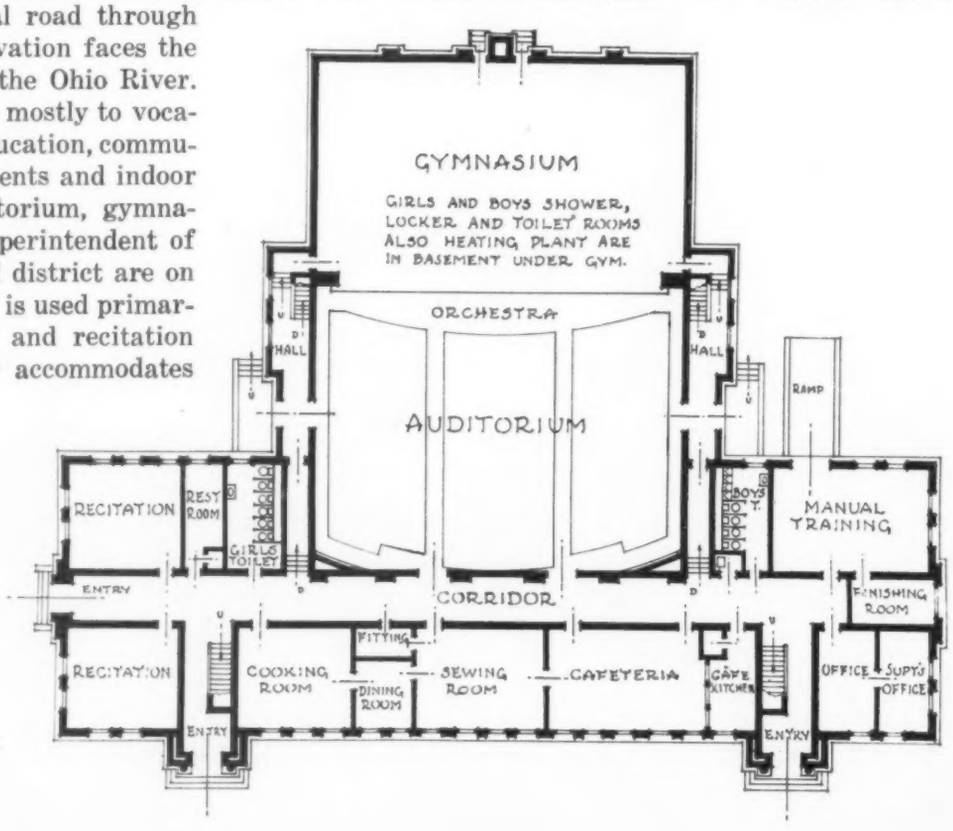
The model dining room in connection with the home economics department has proved a valuable teaching aid.

adequately lighted at night for community and school entertainments by large electric lanterns at all entrances.

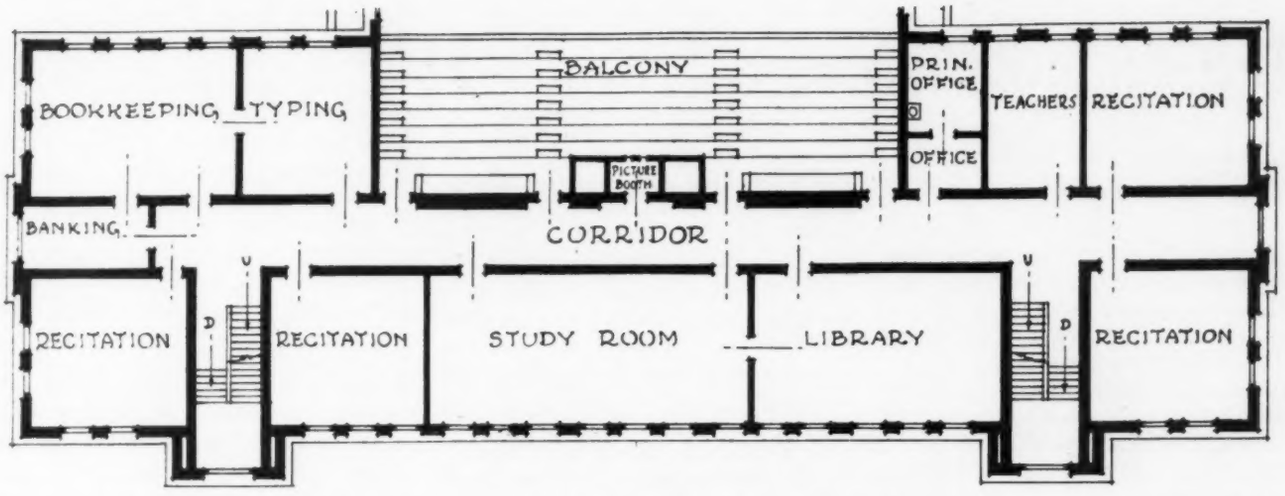
The general floor plan is a symmetrical layout balanced around primary and secondary axes. This plan tends toward a minimum of circulation for interclass movements; at the same time, it held the original unit costs of the building as low as possible. The building proper is three stories high. The west front elevation faces the principal street which is the main arterial road through this district. The east elevation faces the school's athletic field and the Ohio River.

The first floor is devoted mostly to vocational training, physical education, community and school entertainments and indoor athletic events. The auditorium, gymnasium and offices of the superintendent of schools of the consolidated district are on this floor. The second floor is used primarily for study, commercial and recitation purposes. The third floor accommodates the sciences, the various laboratories and the music department. The mechanical equipment, heating plant, fuel storage, boys' and girls' locker rooms, shower and toilet rooms are in the basement under the gym.

Since the school is situated in a steel, iron and coal producing country, it was considered logical by the architect to design a building medium dark in tone which would not discolor readily under the prevailing atmospheric conditions. A modern derivation of Tudor English suggested itself since the darker tones of brickwork are generally used with this style of architecture. Both the exterior and interior of the building are ornamented moderately. The purpose was to create an interesting and workable building without overemphasis on elaborate detail.



The first floor is devoted mainly to vocational training, physical education and school and community entertainments. The superintendent's office is on this floor.



The second floor of the building is used primarily for study, commercial and recitation purposes. The principal's office is on this floor.

In structural features the building follows the latest current practice for fireproof construction. Structural steel is used for long span work over the auditorium and gymnasium, the balcony construction and stage proscenium. Floor and roof slabs are reenforced concrete over metal bar joist. Exterior and interior bearing walls, pilasters and piers are constructed of hard burned brick. Nonbearing interior partition walls are constructed of hollow tile. Galvanized iron heating and ventilating flues are surrounded by hollow tile partitions.

Several Different Types of Flooring Used

Exterior walls are faced with Old English style brick of a medium dark red tone. Stone trim is of carved Indiana Bedford limestone ornamented to a limited extent to accentuate the main and secondary entrances and towers. Steel windows are used throughout the structure. They are painted to harmonize with the exterior color scheme of the building.

The interior of the building is plastered throughout. The hard, smooth, white finish will be painted and tinted after proper seasoning. The auditorium is finished in Caen stone with decorative ornament in low relief of Adams period design. Entrance lobbies, stair halls and corridors have a Tennessee marble wainscot. Entrance lobbies, stair halls and first floor corridors have a terrazzo finished floor, while the second and third floor corridors have a heavy battleship linoleum floor. All corridor walls throughout have flush steel lockers finished to harmonize with the Tennessee marble wainscot. Stairways are of steel with terrazzo treads and ornamental wrought iron railings. White oak interior finish, doors and trim were used throughout and natural slate blackboards were installed. Finished maple flooring was laid for all recitation rooms, classrooms and gymnasium. Mastic floor was used in the auditorium.

Direct and indirect bronze lighting fixtures were installed.

Modern sanitary and plumbing systems were installed with adequate toilet and shower facilities. The building is equipped complete with a mechanical warm air heating and ventilating plant with automatic control. Other built-in features are a complete central vacuum cleaning system; electric time, program clock and signal system; telephone and radio outlets. In all this work the latest engineering practice was followed.

The building was completed with the latest and most practical school equipment and furniture that could be obtained. The vocational rooms, cafeteria, auditorium, gymnasium, commercial rooms, recitation units, library, science rooms and various laboratories are furnished with equipment suitable for these departments, making complete the part each plays in creating a harmoniously working whole.

Proper Treatment Will Save School Floors

In the operation of the school it is essential that the superintendent give personal attention to the maintenance of floors, says William John Cooper, former U. S. commissioner of education, in his booklet, "Economy in Education," published by the Stanford University Press.

Floors can be easily worn out unless they are properly treated. In general, floors are oiled. Here attention should be given to the purchase of oil, the purchase of instruments for applying it, and the like. Cement and terrazzo floors require different treatment, and the treatment required for linoleum floors is still different. In some buildings the floors are waxed. In such cases repeated waxing is necessary and much study must be given to possible savings.

Better School Practices

Monday Morning Bulletin Helps Teacher Morale

If there ever was a time when it is necessary for our profession to stand shoulder to shoulder, it is during these turbulent days of reconstruction. Our teachers tell me that they have appreciated most thoroughly the weekly bulletins of concise, definite information that have come out regularly from this office during the last two years. This bulletin is prepared each Saturday morning in order that it may be placed in the hands of each teacher on Monday, and I know it has contributed to unity of action and group solidarity during this crisis. A word of encouragement here and there, accurate information on current issues, an occasional reference to the best new professional literature, and general information on personnel and matters of the school system—all these are incorporated in this circular, which reaches all teachers as they begin the week's work.—W. R. DAVIES, Superintendent of Schools, Superior, Wis.

Seattle Is Developing 13-Year Curriculum

The plan of developing a locally prepared thirteen-year integrated curriculum is well under way. This has been made necessary because of the fact that practically all Seattle's children remain in school until high school graduation. The first such course, "Fundamentals in Oral and Written Expression," was printed recently. Committees of teachers are now at work unifying and integrating the social science and mathematics courses. Another committee is collecting material on character building.

The procedure followed in this work is exemplified by the English course, the first to be completed. A committee of teachers representing all grade levels was appointed by the superintendent. This committee collected not only all courses in use in the different units of the Seattle system, but also studied representative courses from other school systems.

The material was then arranged for continuity both horizontally and vertically, that is, each phase of the work was assigned a place in the work of each grade and was advanced year by year until it should be thoroughly covered in the thirteen years.

After more than a year's work by the committee, the tentative course was printed in chart form and given to all teachers in September, 1932, for experimental use. At the end of the year the comments of teachers were gathered, and from the year's collective experience of the corps, the course was prepared in its final form by the committee. This was printed in pamphlet form and distributed during the first semester of the current year.—VIRGIL SMITH, Assistant Superintendent of Schools, Seattle, Wash.

Radio-Public Address System Proves Satisfactory

Through the cooperative efforts of the senior class and the manual training and science departments, we have installed in David Crockett Junior High School a radio, microphone, amplifier and thirty-seven loudspeakers.

The system, installed at a most reasonable cost, works in a highly satisfactory manner. It has been used to broadcast routine announcements, emergency announcements, readings, talks and solos by pupils, debates, programs by home room sections and subject groups, programs by glee clubs and the school orchestra, the NBC Music Appreciation Hour, the American School of the Air, Bible readings and news of current events. It has also been used for gathering information for the parent-teacher association and the central office as well as for school-wide tests.

We have found it advisable to have a faculty committee work out plans for broadcasting school programs and for receiving outside programs.

Senior classes planning to leave parting gifts to their schools can perhaps be interested in giving radio-public address systems. School boards and parent-teacher associations may also be prevailed upon to supply such equipment.—E. W. JACKSON, Principal, David Crockett Junior High School, Beaumont, Tex.

Spending as an Economy Measure

The local board of education recently voted, as an economy measure, to replace ten four-year-old typewriters in the commercial department.

There were eighteen machines in the department. All were at least three years old, so that free service calls could no longer be expected. There were, then, three possible procedures: (1) to continue with the old machines so long as they would operate; (2) to replace with new machines, or (3) to enter into a service contract with some typewriter firm to overhaul the machines and supply service.

Reliable service would cost $7.50 per machine per school year. This would include a new platen, cleaning, adjustments and six service calls. All necessary parts aside from the platen would be charged for and extra service calls were to be paid for at the rate of ten dollars each. The cost of this plan for one year, with no extra service calls, would amount to $135.

By using the trade allowance on the four-year-old machines, it was possible to get new typewriters for a cash outlay of $32.50 each. To exchange the ten oldest machines, then, would cost the district $325. The difference between the cost of servicing the old machines and that of exchanging ten of them for new ones would be $190.

But consideration of the comparative cost over a three-year period threw another light on the problem. If the ten four-year-old machines were replaced with ten new ones, the company representative would be making regular calls to service the new machines and the eight old ones could be serviced at the same time.

Over a three-year period, service costs on the eighteen old machines would have totaled $405. Subtracting the cost of exchanging the ten old machines for new ones left a saving of $80. In addition, at the end of the three-year period the school would have ten three-year-old machines while if service was purchased rather than new machines the machines would be seven years old.—C. L. CRAWFORD, Superintendent, Wagner, S. D.

If you have practical suggestions that might help other school administrators The NATION'S SCHOOLS will be happy to have them for inclusion on this page

Summer Work for School Clerks

By ARVID J. BURKE
Principal, Schuylerville High School, Schuylerville, N. Y.

Summer may be a period of idleness for pupils, but it's no time for school clerks to rest on their oars. There are many office tasks that can be performed to better advantage during the summer than while school is in session

THE advantages of doing part of the school clerical work during the summer are numerous. First, information or materials needed for the new term will be available when school opens; second, certain clerical work, such as making reports, can best be done during the summer; third, the clerical burden of the regular term will be lightened; fourth, more work can be done with the same clerical staff, and fifth, clerical work often can be done more efficiently during the summer.

It is difficult, however, to determine exactly what summer clerical work can be done most advantageously in all schools, because of the many variables involved. After studying more than ten thousand duties pertaining to the functioning of a school system, I selected over three thousand that must be performed before a school system is ready to function. From these I selected, insofar as possible, those clerical tasks that generally could be performed during the summer.

These (with minor details omitted) will be discussed under five headings: (1) getting the office ready for work; (2) doing typing, duplicating and filing; (3) keeping accounts, records, reports and statistics; (4) attending to supplies and storeroom, and (5) miscellaneous clerical duties.

The summer vacation is the most opportune time to get the office ready for work, as certain necessary rearrangements cannot always be made while school is in session.

Typing, Duplicating and Filing Work

Among such changes are included adding new furniture or equipment or having repairs made to the old; rearranging furniture and equipment and seeing that it is easily accessible to those who use it most frequently; procuring needed blanks, forms and office supplies; removing obsolete materials from the files; providing new files or rearranging old files; posting new office hours, and putting the mail box and bulletin board in order.

It is not easy to enumerate all the typing, duplicating and filing that can be done while school is closed, because few schools are likely to be undertaking the same projects at the same time. In general it can be said that typing, duplicating and filing based upon the work of the year just closed and work of this character needed for the opening of the new term should be done during the summer months.

It is impracticable here to list all possible topics, but some probable ones are: alterations, changing programs, conditions for admission to schools, improvements, new courses, new equipment, new pupils, opening dates, preliminary instructions to the staff, registration, staff changes and summer school. Certain correspondence can be left to the clerical staff to handle during the summer.

Record Work Is an Important Summer Duty

Keeping accounts, records, reports and statistics probably is the most important and most time consuming summer clerical duty. Usually it will be limited to those facts that are not available until the old school year has ended and which will be needed when the new term begins.

It embraces facts on pupils' permanent records, such as acceleration and retardation; attendance; causes of failure; causes of leaving; courses (date, class averages, number of weeks' studied, final average and test marks); credits or units; date of graduation; days' absent; days' absent illegally; diploma number; eighth grade or junior high school promotion; extraclass activity participation and awards; follow-up after graduation; graduation; honors or prizes; laboratory work; preliminary certificate number; profile chart; rank in class; regents or college entrance grades; schools attended; shop work; tardiness; withdrawal, and work permits.

In addition, records relating to attendance and pupil accounting may be handled during the summer, namely: (1) collecting and filing registers; (2) figuring aggregate days' attendance, average daily attendance and statistics for the attendance

report; (3) preparing and filing class lists, extraclass activity lists, grade lists, lists of nonresidents, attendance problems, promotion lists and section lists from the tentative spring registration and attendance reports; (4) providing census enumerators with blanks, directions, maps and census sheets; (5) tabulating the census for school use, listing the physically handicapped and classifying children under school age, of school age or over school age, and those who will enter school for the first time; (6) entering census data on permanent records, including address, age, date of birth, date of census, name, parents' names, residence, school last attended and sex, and (7) distributing new registers and other pupil accounting materials for fall use.

Much may be done during the summer to make the tentative spring registration ready for use, such as: (1) checking the registration cards for completeness, arranging them alphabetically and filing them; (2) tabulating the classroom and extraclass activity registration; (3) helping make the schedule; (4) checking individual programs against the tentative schedule and making necessary changes, and (5) keeping records and making reports on average size of classes, conflicts, classes meeting fewer than five times a week or requiring double periods, and the registration by curricula, rooms, laboratories, buildings, classes, districts, extraclass activities, grades, gymnasium periods, home rooms, library periods, lunch periods, school departments, sections, sex, shops, study halls, subjects and teachers.

Many Business Tasks May Be Performed

Miscellaneous pupil records, such as the following, may be compiled during the summer: tabulations and graphs of test scores, distribution of marks according to subjects, teachers or grades; lists of alumni and former pupils, pupils promoted, sixth, eighth, or ninth year pupils, diplomas awarded, preliminary certificates issued or prizes awarded, and reports and summaries of final examinations or test results.

The staff records and reports that may be handled during the summer are: annual reports, attendance, committee reports, summer addresses, teaching results, accomplishments and professional achievements, growth in service, summer activities and the new teaching load.

In addition to the foregoing pupil and staff records and reports there are a number of financial, property and transportation accounts that should be attended to before school opens in the fall. They involve: (1) making out the summer pay rolls; (2) helping prepare the new fiscal calendar; (3) receiving, depositing, issuing receipts for and recording tuition payments; (4) tracing and verifying bills and seeing that they are paid before the fiscal year ends; (5) balancing the various accounts at the end of the fiscal year and helping make the annual financial report, and (6) entering in the accession books all property received during the summer and charging any property that may have been given out.

The following duties relating to records and reports may be handled during the summer: (1) filing the annual report of the board, copies of examinations, old desk calendars, annual school meeting proceedings, parent-teachers' association report, reports to the state department of education, statistical reports, principal's or superintendent's report, and survey or research reports, and (2) placing permanent records in the safe or vault, destroying useless or out-of-date records, reports and statistics with the consent of the executive, and listing missing records and reports.

Clerical Duties

It is not always advisable financially to make all purchases during the summer months, but it is desirable to have them delivered during the summer. The tasks growing out of this function are: (1) filing requisitions for needs; (2) taking annual inventories of movable property and checking these inventories against the accession books; (3) locating missing property; (4) ordering whatever is needed as directed (preparing bidder's list with specifications, arranging meetings to show samples, filing samples and catalogues, tabulating bids, notifying successful and unsuccessful bidders, checking orders received, correcting errors, reporting damage and breakage, exchanging old books and equipment for new, comparing materials received with samples and investigating delayed shipments); (5) distributing supplies and equipment needed in the fall; (6) storing supplies and equipment; (7) advising new teachers how to secure supplies; (8) keeping the storerooms in order, and (9) notifying persons who have not returned school property.

The four classifications discussed obviously do not include all the office work that must be done during the summer. Some of the other duties are: (1) sorting and forwarding summer mail; (2) helping new staff members to find living quarters; (3) seeing that the teachers' room is in order; (4) notifying substitutes to report at the opening of school; (5) correcting errors in typed, duplicated or printed materials, proofs and stencils; (6) helping correct standardized tests; (7) forwarding examination papers to the state department of education, and (8) giving publicity to many of the subjects listed under typing and duplicating.

Visual Aids at the World's Fair—A Royal Road to Knowledge

Mathematical exhibits at the 1934 World's Fair will satisfy both the schoolboy and the scientist who has devoted his life to one line of activity. Four major subdivisions of the science of mathematics—numbers and algebra, geometry, analysis and applied mathematics—will be represented in dynamic exhibits

By MAJOR CHESTER L. FORDNEY
United States Marine Corps

PROGRESS is made from point to point on the paths of attainment of knowledge. The end of the path is never in sight—the traveler can see but to a turn in the road.

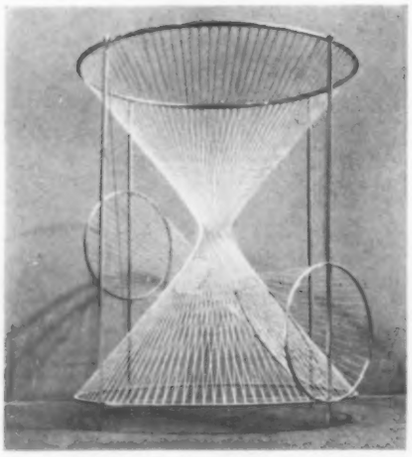
The trail of the pioneer, of the explorer, becomes in time a path and then a road to those who follow in the wake of the trail breakers. It is not fantastic, therefore, to conceive of some of the travelers retracing their way for the multitudes who must pass over the road. In the basic sciences division of the department of exhibits at the World's Fair, a group of men have completed the work started six years ago of building roads of knowledge where there were but trails before. The scope of the science exhibits will be greater in 1934 than during the first year. The Hall of Science offers a remarkable chance for the adolescent boy and girl to secure a visual understanding of marvelous vistas in science.

A Century of Progress has a definite theme or motif. The contributions of science to knowledge during the last century have been great. More knowledge has been gained in the last one hundred years than was in existence at the beginning of the century. It is the aim of the exposition to show by dynamic, living exhibits this progress in scientific knowledge and to show how man has applied this knowledge in industry and in the pursuit of happiness.

The visitor to A Century of Progress has available a broad road to knowledge which, if not shorter than the conventional way, is, we like to believe, wider and more easily traveled. The exhibits and the methods used in their presentation should have a definite effect on education.

The impressive, symbolic pylons at the entrance to the Hall of Social Science at the World's Fair of 1934 are shown at the top of the page. The giant figures represent elemental forces of nature.

The impression must not



This exhibit in space geometry shows the intersection of two ruled surfaces. Such surfaces are composed of straight line elements. The intersection is known as a "Quartic of the First Species."

be left that a visit to the chemical section in the beautiful Hall of Science will give the visitor a complete course in chemistry but it is our hope that he will get from it a general picture of the science.

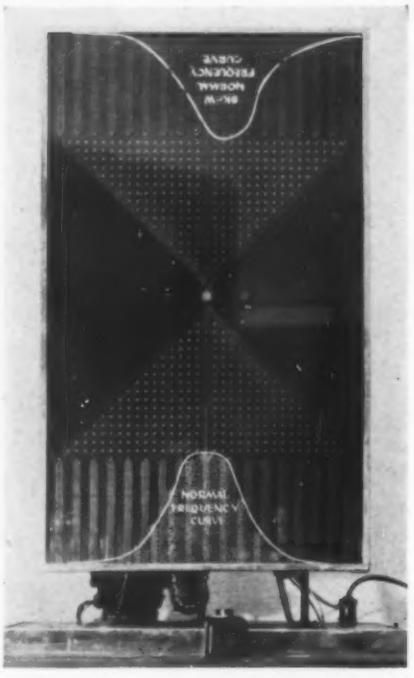
The exhibits at A Century of Progress are modern in presentation. The museum type of exhibit has been discarded wherever practicable. Motion brings interest and the exhibits therefore are of the so-called dynamic type. When a particular phenomenon was decided upon as being suitable and desirable as an exhibit, the apparatus had to be designed. The exposition will last approximately 150 days and to survive this period each bit of apparatus must be sturdy and as foolproof as possible.

Among the millions who will attend A Century of Progress International Exposition will be found a wide range of intelligence, training and appreciation. If the scientific exhibits are to be of such a nature that they will appeal only to persons with scientific training, the number who will be interested will be small indeed. If the exhibits are popular the exposition will not have kept faith with those scientists who have given so generously of their time and effort. A general picture of science must be given and yet the show must not degenerate into mere fireworks. The scientific exhibits must be true. There can be no charlatanry. It is the mission of the division of basic sciences to show the progress in science.

One of the least adaptable sciences for purposes of exhibition is mathematics. Perhaps the oldest science, it is characterized by its perennial youth. The mathematical exhibits at A Century of Progress may illustrate the statement that the exposition will have some influence on education.

Dr. E. T. Bell, in his delightful book, "The Queen of the Sciences," states, "Of higher arithmetic the graduate of a good school will learn precisely nothing. Unless extremely fortunate, he will never even have heard of the theory of numbers." A broad view of the science is seldom if ever given in educational institutions. The student is given training in special tools as he proceeds on his path of knowledge. He progresses from algebra to geometry, from trigonometry to calculus. The last course offered him usually is the history of mathematics.

It appears that a careful and studied effort has been made to withhold the beauties of the "queen of the sciences" from those whose acquaintance with mathematics is a forced one and not the results of an interest awakened by her charms. A conception of pure mathematics is seldom given or offered to undergraduates in higher institutions. We are endeavoring to present to an audience of millions a pic-



Left, the Galton quincunx demonstrates that distribution in nature is according to the frequency curves of mathematics. Below is shown the periodic table of the ninety-two chemical elements. The revolving globe shows sources of common elements.

From the modernistic towers of the Federal Building may be seen the Shedd Aquarium and Chicago's beautiful skyline.

ture of the realm over which rules the "queen of the sciences."

In the making of this picture the most distinguished mathematicians in the country have given generously of their thoughts and effort. Mathematics has been divided into four major subdivisions for the purposes for exhibit. They are: numbers and algebra, geometry, analysis and applied mathematics.

As the visitor enters the north lobby of the Hall of Science he will behold in the center of the lobby a large octagonal prism, the design of which will suggest a structure of the ancients. On the north, east, south and west faces of the prism are screens on which are projected from inside the prism images from slides. These show the progress made through the ages in the subdivisions mentioned. The slides were prepared by Prof. Louis Karpinski, University of Michigan. Almost a year was taken up in their making. Their range of interest is wide. The school child of ten will enjoy the spectacle and will sympathize with the little Roman who had to compute with the abacus. The interest of his elders may be taken for granted.

Visitors to the geometric exhibits will be rewarded by a spectacular display of Pollock's Models. Here ever changing surfaces of light will intersect stringed surfaces in motion. The curves of intersection will stand out as if made of incandescent wires. Those who have with closed eyes and bowed heads tried to visualize the figures and curves met in descriptive geometry will groan in an agony of regret that this presentation was not available in freshman days. Nor has the conic section been forgotten. The ellipse degenerating into a circle and into a double straight line will be shown in a setting of dignified beauty.

The solution of a differential equation of wave motion by D'Alembert in 1747 will be presented as the starting point of radio communication. Michelson's harmonic analyzer, used in the determination of the velocity of light, will be on display, and working.

The "queen of the sciences" exchanges her regal robes for the garments of a servant and is, in another booth, the handmaiden of the sciences. The application of mathematics to economics is shown in the correct presentation of the law of supply and demand.

The schoolboy looking for action and motion may climb aboard a revolving platform near which is the imposing title, "The Conservation of Rotational Momentum." The professor of physics will be interested in the derivation of the expression for the momentum of rotation given in the legend. Whenever possible the principles illustrated are connected with the individual who discovered or enunciated the principle.

It is hoped that the visitor will be led to the view that "the deliberate attempt to create something of immediate utility leads as a rule to shoddy work of only passing value." He will agree with Jacobi that the true end of mathematics is the greater glory of the human mind.

If this presentation of the basic sciences fulfills the hopes of those who have planned it, it is not unreasonable to think that although there may be no royal road to knowledge, at least there is a road, parts of which are broad highways, at A Century of Progress. Doubtless thousands will travel over these highways during the summer of 1934.

School Plant Maintenance Is a Summer Job

Summer maintenance plans should be made early. First, the entire program should be mapped out. Then costs should be determined and the availability of funds should be ascertained, after which the plan is ready for recommendation and final approval. A columnar estimate sheet and a card index file are found useful in this connection

By FRED W. FROSTIC
Superintendent of Schools, Wyandotte, Mich.

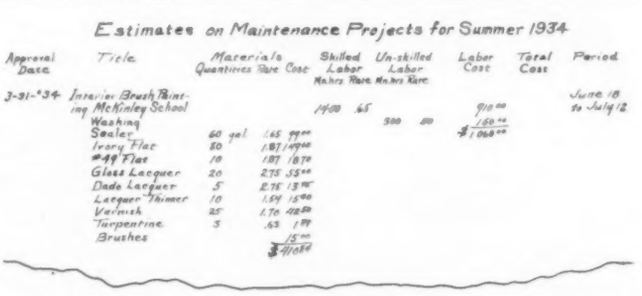
MAINTENANCE of the school plant is a constant demand that must be met by the school executive. The problems incident to economic depressions may dominate administrative thinking, the budget may be overtaxed with many demands and schools may be closed for lack of funds, but the specter of plant disintegration rises like Banquo's ghost and seats itself at the table of school funds and will not for long be denied.

During the first years of economic stress even urgent demands of maintenance were passed on to the next budget in the hope that there would be a little more margin for such expenditures in the near future. But repair costs compound rapidly and the only alternative to paying double or triple the cost later is to repair while the damage is slight. It is even better to anticipate damage and put a patch on the roof here, point a weak joint in the stone there and repaint that steel sash before actual break or corrosion occurs.

Because of better opportunities for working in or around school plants while they are for the most part unoccupied, and because of availability of regular staff help and better weather conditions, a large part of school plant maintenance is usually reserved for the summer months. Maintenance of time and bell systems, telephones, lighting and plumbing is more or less a continuous activity, but 75 per cent of maintenance problems are seasonal, and of these the repair portions are summer jobs.

Carefully planned maintenance schedules will distribute maintenance costs and greatly reduce the expenditures necessary under a *laissez faire* policy of doing things "when we can get to them" or waiting until large repair jobs accumulate.

Summer maintenance plans should be made early. A general survey should be made by the executive or his agent. Suggestions from the administrative and operating staff should be collected and listed. In order to get a clear picture of the needed program, columnar ruled paper should be used. There should be a column approximately 2½ inches wide for title and brief description, followed by seven columns 1¼ inches wide headed as follows: material quantities, cost of material, skilled labor and rate, unskilled labor and rate, labor cost, total cost and period for completion. A column at the left of the title may be used for approval date. (See Fig. 1.)



Estimates on Maintenance Projects for Summer 1934

Approval Date	Title	Materials Quantities	Materials Value	Materials Cost	Skilled Labor Hours	Skilled Labor Rate	Unskilled Labor Hours	Unskilled Labor Rate	Labor Cost	Total Cost	Period
3-31-'34	Interior Brush Painting McKinley School				1400	65			910.00		June 18 to July 12
	Washing						300	60	150.00		
	Sealer	60	gal	165	99.00				$1060.00		
	Ivory Flat	80		1.87	149.60						
	#49 Flat	10		1.87	18.70						
	Glass Lacquer	20		2.75	55.00						
	Dade Lacquer	5		2.75	13.75						
	Lacquer Thinner	10		1.54	15.40						
	Varnish	25		1.70	42.50						
	Turpentine	3		.63	1.89						
	Brushes				15.00						
					$1410.84						

Fig. 1. Sample entry on estimate sheet.

After the entire program has been mapped, costs determined and the availability of funds ascertained, the plan is ready for recommendation and final approval. This chart may be used as a guide sheet for the season's projects or as a record of projects to be completed when funds are available. While such an estimate sheet is necessary to meet immediate needs, it is also valuable when a long term continuous maintenance program is planned

and it can be used for summarizing at any particular period the work to be done.

The extent of the maintenance survey for the coming summer will vary with the maintenance policies of school systems and the types of plant. The execution of the plan will depend upon the availability of funds, the urgency of the work to be done and the adequacy of planning. Each school system must determine these factors for itself.

ROOSEVELT OUTSIDE ENTRANCE DOORS (18 Oak Doors)

Year	May 1	Nov.1	Notes		
1930	Jun 20		Mr.Hardegger	60 hrs.	Treat.1
1930		Nov.4	Mr.H.	18 hrs.	2
1931	May 1		Mr.H.	20 hrs.	2
1931		Nov.2	Mr.H.	19 hrs.	2
1932	May 2		Mr.H.	20 hrs.	2
1932		Nov.1	Mr.H.	18 hrs.	2
1933	May 1		Mr.H.	62 hrs.	1
1933		Nov.1	Mr.H.	18 hrs.	2

Fig. 2. Sample of continuous maintenance card with entries as work is completed.

No general plan will exactly fit all. Doors that require biannual treatment in certain climates and exposures require entirely different treatment under other conditions. While I shall not attempt to list all the things that need to be checked in such a survey, the following suggestions may serve to indicate the type of repairs or danger zones to look for.

The roof requires careful scrutiny. Needs will vary with the type of material. The surface should be carefully checked for weak spots where leaks are likely to develop. The under surface should be examined from the attic space to detect leaks. The latter inspection may well be done during a heavy rain storm and the spots should be carefully marked. All metal flashings should be examined for loose joints or corrosion. If flashing is iron, painting is likely to be necessary and for this a good grade of metal paint or aluminum should be used. If copper flashing has been used, only the solder joints need checking. Careful notes should be made of all points needing attention and the extent of the repairs required.

Before final action is taken on a roof project, a check should be made for possible roof guarantees that may have been given by the contractor or manufacturer. Such roof guarantees often extend from five to twenty years and the owner is often unaware of their existence. Original specifications on the job should be examined to determine whether or not such a guarantee was required. Then the guarantee itself, which should be kept in the maintenance file for ready reference, should be looked up. Considerable money may be saved on roof repairs by requiring the company that gave the guarantee to do repair work.

The inside of parapet walls should be examined carefully for cracks and crevices which allow water to enter and disintegrate the wall. Coping stones on the top of the wall need to be watched for cracks in the pointing that occur as a result of excessive expansion and contraction. All stone and brick work around the top of walls requires constant attention. The best plan is to have these examined and pointed up every summer. If this plan is followed the cost of maintaining these walls in perfect condition will be extremely low. If repair is delayed until the water enters the wall and affects the plaster below, maintenance cost mounts tremendously. It is also well to check stone and brick work around windows, entrances and other points near the ground for needed pointing.

All metal and wood sash should be painted frequently to reduce corrosion, rust and wood disintegration to a minimum. Frequency of painting will depend upon climatic conditions and the kind of material used. Local conditions are always determining factors. Even within the same city the exposure of buildings in manufacturing districts presents an entirely different maintenance problem than that of buildings in residential districts. These conditions must always be considered in long term maintenance planning. Fire escapes and wire fences come under the same type classification and

Treatment 1.
Finish removed with varnish remover, then washed with sal soda, sanded, filled with dark oak filler and stain, two coats Valentine Spar Varnish.

Bi-annual Treatment 2. May 1 and Nov.1
Wash with sal soda, wood alcohol, benzine or gasoline.
Sand lightly.
One coat Valentine Spar Varnish.

Fig. 3. Reverse side of card shown in Fig. 2, showing details of treatments used.

maintenance schedule as do window sash and frames.

Upkeep of exterior doors is an important item in summer maintenance. The needs vary with exposure, material and kind of finish desired. Thus each group of doors is a separate problem. Neglect in upkeep is serious since the entire doors often disintegrate beyond repair in a short time. Frequent painting or refinishing is perhaps more necessary here than at any other place in the building. A definite schedule should be set up after determining the frequency of the treatment necessary.

Summer is a time for resurfacing playgrounds, tennis courts and athletic fields. The type of ma-

terial used will depend upon availability and cost of materials. The ideal resurfacing material for playgrounds has not yet been found and maintenance is a large problem with any sort of material now available.

Under interior maintenance come washing or repainting of walls and woodwork, refinishing of floors and resurfacing of desks and blackboards. Painting and refinishing should be done frequently enough to preserve the surface desired at maximum efficiency. Painting delayed too long is expensive because of disintegration of the surface material under heat. The increased suction requires additional coats of paint with higher labor costs and dirty, stained walls are no asset to the instructional process. Painting schedules in general vary from three to five years.

Marble slabs must be checked frequently to see that joints are tight and slabs are properly anchored. Lockers require tightening of nuts and bolts, replacement of parts and refinishing of corroded surfaces. Seats fastened to floors, as in auditoriums, should be inspected to see that they are securely anchored and that there are no loose parts which quickly wreck the seat under strain.

Card Index File Is Helpful

Motors in the mechanical plant should be thoroughly cleaned, commutators should be planed down if necessary and belts should be rolled and stored for the inactive season. Tanks, heaters and filters should be cleaned out, freed from scale and refinished within. Thermostats and other heat control apparatus should be checked for leaks and for efficiency in maintaining the proper pressure. Radiator valves often need to be renewed and radiators need to be repainted and put in proper repair. Boiler grates should be checked for replacement, the interior of the boiler needs to be cleaned out and flues as well as all control valves and flange joints should be carefully examined. Every operating unit requires the strictest attention to maintain efficiency at a high level if operating costs are to be kept at a minimum.

Some form of continuous maintenance program should be put into use in every system, large or small. One of the simplest devices is the ordinary 3 by 5 card index file. No general type of ruling is entirely satisfactory. If blank cards are used, horizontally ruled on one side and plain on the other, the necessary divisions can easily be made on the card according to the particular job of maintenance. Samples of such cards are shown in Figs. 2 and 3. The data on the card should show the different periods when such work is to be done, as well as notes on just what was done at the time, while the back may be reserved for the specified type of treatment. These cards should be filed under the month-index-card in which the work is to be done. If treatment is required twice annually, as is shown in Figs. 2 and 3, the card may be moved from May to November after the May work is completed.

At the beginning of each month the work to be done that month is ready for assignment on referring to the cards in the file. Cards showing the schedule for room painting, which is to be done every three or four years, may be filed under year-index-cards and at the beginning of any particular year cards affected that year can be resorted under the particular month when the work is to be done.

In setting up a schedule a complete list of jobs should be made, cards should be prepared and periods of work should be carefully mapped out from the experience of men on the job. These may be modified from time to time as needs vary.

How to Prevent Rusty Water in the Hot Water Pipes

The "red water" nuisance, caused by the corrosion of hot water pipe lines, is an unnecessary evil in the school plant. It is extremely aggravating both to the personnel and to the pupils for rusty water to burst forth when hot water faucets are opened. The condition is not difficult to correct, nor does it involve the expenditure of a large sum of money. In fact, the cost is almost negligible.

The Mellon Institute of Industrial Research has made a careful study of this subject recently. It has been found that almost invariably corrosion is due to the presence of dissolved oxygen in the water. It has also been determined that oxygen corrosion may be accelerated by the presence of large amounts of carbonic acid in the water. This gas is present to some extent in almost every natural water supply. In certain cases other factors, in addition to oxygen, may be the chief source of trouble, and in such cases these factors must be carefully determined and steps taken to correct the trouble.

There are several methods of correcting this corrosion, according to Edward P. Schinman, chemical engineer, writing in *Hotel Management.*

One method is to use a corrosion resistant material, such as brass or copper, for the tank, pipe and fittings, or specially lined pipe. This method is being used to some extent, but in existing installations suffering from corrosion, other means are usually resorted to.

The most practical method, and one which is being used in many private and government institutions, is the application of small amounts of sodium silicate to the water. This material tends to form a thin film in the pipe lines and tank which serves as a protective coating and prevents the oxygen from coming in contact with the metal.

By using properly designed chemical feeding devices, the sodium silicate can be fed in proper proportion to the amount of water flowing. It is essential that this feed be designed correctly. The cost of sodium silicate is about one cent per pound, and 1/10 to 1/16 of a pound will prove adequate for 1,000 gallons of water.

Selection of Projectors Depends Upon Their Use

By ELLSWORTH C. DENT
Secretary, Bureau of Visual Education, University of Kansas

This month the matter of selecting appropriate equipment for projected pictures is discussed. Is it to be auditorium equipment or is it to function merely for classroom use? Almost any of the standard projectors will do well the work for which they have been designed but no one will fill all requirements. The need of the school or system as determined by the teachers should be paramount

ALL common forms of visual aids have certain definite values when applied in the proper manner in the classroom. These forms include all types of photographs, prints, stereographs, slides and motion pictures. The chief problem of the average school executive is not that of securing photographs, prints and other unprojected pictures but that of selecting appropriate equipment for projected pictures.

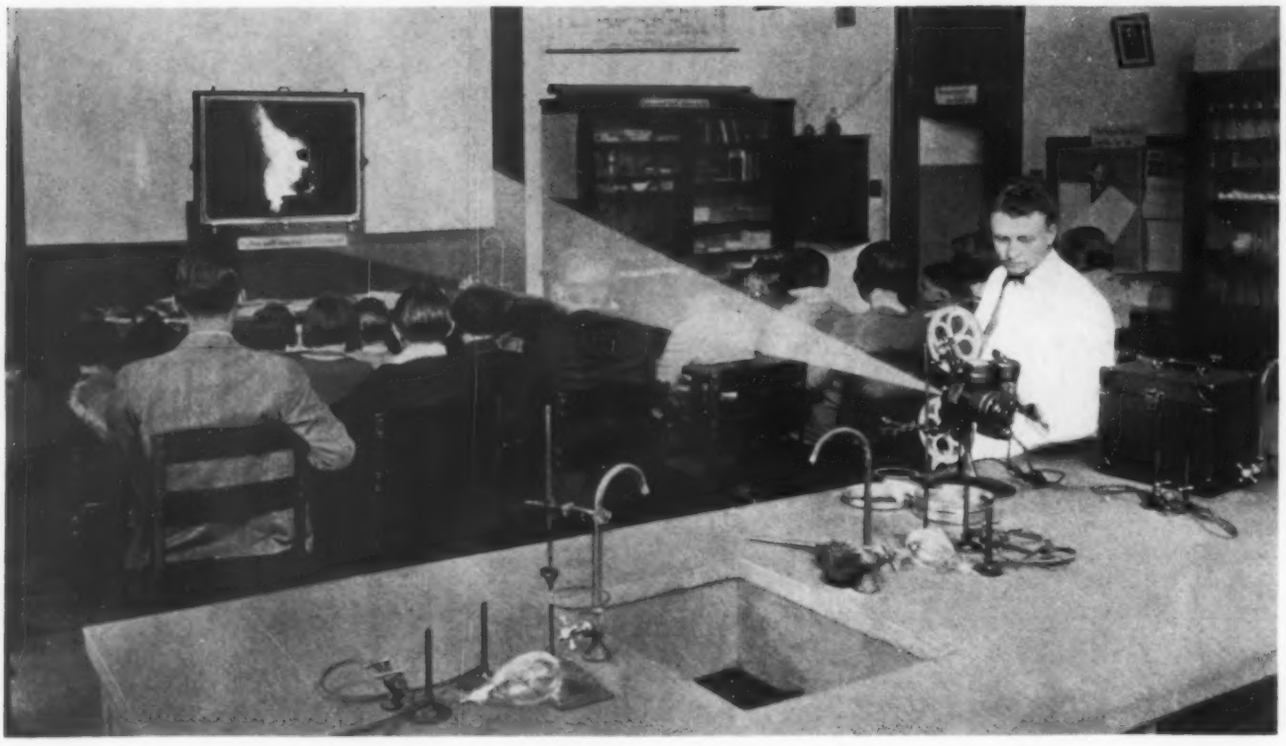
There are many situations in which the teachers, as well as the principal or the superintendent, have an interest in visual aids, but only misfit equipment is available. The teachers soon lose interest, as does the principal or the superintendent, and the pupil is deprived of instruction that would be of great value. Perhaps auditorium equipment is available and the projected materials are needed in the classrooms. Or it may be that attempts are being made to use classroom equipment in the auditorium. Either situation will dampen the ardor of the most enthusiastic teacher. It is possible, also, for a school to have too many different types of materials and equipment, with an inadequate supply of any one or two.

No attempt will be made in this discussion to offer suggestions for those situations under the supervision of a visual instruction director. An attempt will be made to assist the superintendent or principal of the school or system of moderate size.

The primary factor in any project is the plan or outlined course of action. This becomes especially important in the selection of projection equipment. Many of the mistakes in selection have been made because careful consideration has not been given to the situation in which the equipment is to be used. In this, as in nearly all other educational problems, the teacher is the key to the situation. The teacher must, through actual or proposed application of the equipment to her job, decide upon that which will provide the most effective pupil response. It is important, therefore, that equipment for the use of projected pictures in any situation should be selected after due consideration among the teachers.

Actual trial of the equipment and materials should be arranged, either by securing equipment on approval or by providing for demonstrations by representatives of the manufacturers. Either procedure will give the teacher a good idea as to whether or not the equipment will fit into her situation. Furthermore, such a trial should tend to develop among teachers a definite desire or demand for the equipment, which would be an excellent state of affairs.

The opaque object projector is so called for the reason that it will project to the screen photographs, postal cards, drawings and other flat surfaces, reproducing colors accurately. A picture in a magazine or reference book may be projected before a class to serve as a basis for discussion. The chief advantage of the instrument is that materials for projection may be secured at little cost from hundreds of sources. The most serious limitation is that the room in which it is used must be darkened thoroughly if satisfactory results are to be secured. The great loss of light through reflection reduces the brilliance of the projected image to about one-fourth or one-third the brilliance of a good glass slide when used in a projector of standard size.



An educational film is receiving close attention.

These projectors are available in various styles and combinations. The most common are those designed primarily for classroom use. Projectors for opaque objects only are available at $75. A glass slide attachment may be added at a cost of $35, and a film slide attachment may be had at a cost of $38.50. It is usually best, however, to omit the attachments and secure separate projectors for the other types of service. The opaque projector is of necessity somewhat more cumbersome to take from place to place than is a glass slide projector, for example. Furthermore, one or two attachments on one projector would limit the use of any part of the equipment to one room at one time, while two or three separate projectors could be used in as many places simultaneously. Since the attachments cost more than half as much as separate projectors, the saving effected by a combination instrument is not great.

The glass slide lantern remains the most useful member of the projector family. It projects brilliant pictures under ordinary conditions and lends itself to many possible applications. Good slides for use in the teaching of almost every school subject may be secured at moderate cost. The cost of a good slide is much greater, of course, than the cost of a postal card or a small picture to be projected in the instrument mentioned above. But projection results are more brilliant, even under somewhat adverse conditions with respect to interfering light. It is always best to darken the classroom for any type of projection, but fair results may be secured with glass slides even when it is impossible to shut out the light. There is no projector that can compete successfully with direct or indirect sunlight, but the glass slide projector is the strongest competitor of all.

The most practical glass slide lantern for the average situation is the standard classroom lantern which ranges in price from $60 to $70. It is efficient, simple to operate and light in weight. It will operate successfully for projection distances up to fifty feet or more. If a projector is desired for auditorium use regularly, it would be advisable to purchase one of the special auditorium projectors. These have stronger lamps and a cooling device to protect the coloring of slides from excessive heat.

Low cost is the chief advantage of the film slide and the projection equipment accommodating it. These little projectors range in price from $48 upward, including the usual carrying case. They are light in weight, compact and reasonably efficient in operation. It should be kept in mind, however, that these miniature projectors will not give projection results equal to those that may be expected when glass slides are used. The picture is either 1 by ¾ inches or 1 by 1½ inches in size, so that the same results cannot be expected as those obtained with the larger glass slide. Many schools make extensive use of this type of service, however, and consider it highly satisfactory.

Two types of film slide projection equipment in rather general use are (1) an instrument that

is a complete projection unit and (2) an attachment for the use of film slides on the opaque projector or glass slide lantern. The attachments range in price from $25 to $38.50, and are highly satisfactory. Since the attachment costs nearly as much as a complete projection unit, it is advisable to buy the separate unit. It is then possible to use the two projectors in different places at the same time.

Rapid advancements in the application of the motion picture to teaching create a rather hazardous situation for the person who attempts to advise prospective purchasers. Recent developments, however, have reached a state of stability that reduces the hazard somewhat. Not long ago, it was considered impossible to record and reproduce sound satisfactorily on 16 mm. motion picture film. Now the 16 mm. sound-on-film seems to have replaced the 16 mm. sound-on-disk for all usual educational and industrial purposes. The reproduction of the sound is accurate and sufficient in tonal range to take care of all normal sounds.

Sound Film vs. *Silent Picture*

This development of the sound film into a usable tool for classroom instruction creates another problem that must be given careful consideration. Although the sound film offers a decided advantage in situations that require sound to give the correct concept, many educators feel that certain motion pictures do not require sound. They state that sound should be used only when it will contribute and should not be added for the possible factor of interest alone. Some schools use silent films regularly at little cost and hesitate to change to sound equipment and films until certain values have been more definitely established.

Other educators of good standing feel that the sound film is destined to replace the silent picture in the near future. They contend that more situations require the sound and that silent films may be used on the sound equipment when advisable. It is rather safe to state that there is now an ample supply of both silent and sound films, in existence or in prospect, to accommodate the needs of the average school.

Silent projectors for 16 mm. motion picture film range in price from $125 upward, the average instrument for classroom use costing about $150. Larger and more powerful projectors for auditorium use range upward in price to $310, with carrying case. The sound-on-film projectors range in price from $375 upward, the average set of equipment costing about $500. The sound-on-film projectors may be used for projecting silent film, but the majority of silent projectors are not directly convertible into equipment for the use of sound films. Some may be exchanged for sound projectors with full allowance for the cost price of the silent projector.

No discussion of motion pictures in the educational field would be complete without mentioning the recent rapid strides in teaching motion picture appreciation. Experiments conducted by the Payne Fund clearly indicate that the theatrical motion picture exerts a powerful influence upon the actions and thoughts of all, especially upon young persons. These same studies point out rather definite values to be derived when motion pictures are used as a basis for composition.

This trend may make it advisable for larger schools to secure 35 mm. sound-on-film equipment for auditorium use—equipment that would accommodate the standard theatrical features with high educational content. Such equipment will range in price from $900 upward.

Certain items will require early consideration in making plans to secure projection equipment. Definite values are attributed to each of the various types of visual aids when properly applied. The need of the school or system as determined by the teachers should be paramount. Almost any of the standard projectors will do well the work for which they have been designed, but no one projector or type of visual aid will fill all needs.

Still pictures should be used in all cases except where motion is needed to convey the message. Sound should be added only when sound contributes to the value of the film. Those who can afford to own them—and few schools can really afford to be without them—should have a complete assortment of projectors for opaque objects and pictures, glass slides, film slides and a 16 mm. sound-on-film projector that will accommodate silent pictures. The cost would be slight in view of the possible benefits to be derived.

True Visual Instruction Program

The true visual instruction program is not confined to talking pictures, silent motion pictures, glass slides or to any one or two of the various types of effective illustrative materials. It includes each of these, as well as photographs, stereographs, exhibits-specimens-models, the school journey, film slides, charts, maps, globes, the blackboard and other objective materials.

The extension division of Brigham Young University, Provo, Utah, has established a loan service providing for distribution of visual instruction materials among schools, churches and organizations of the inter-mountain area.

The annual meeting of the Department of Visual Instruction of the National Education Association will be held in Washington, D. C., on July 2 and 3, concurrently with the meetings of the N. E. A.

School Feeding Backed by an Educational Program

By VERA M. STEMPLE
Public School Cafeterias, Department of Education, Baltimore

ABOUT 1,250 pupils per day are being provided with lunches by the public school cafeterias in Baltimore. We teach good food habits by the sale of combination lunches and strive by various devices to arouse the interest of the pupils and parents.

One of our most popular dishes is the hot plate. It consists of meat or a meat substitute and two vegetables, or three vegetables, or two vegetables and a hot roll or a hard cooked egg. Regardless of increased food prices there has been no raise in price to the pupil nor has there been any reduction in the size of portions or quality of food served. The pupil with a dime to spend is encouraged to buy the hot plate.

Many pupils are bringing their lunches from home and spending only a few pennies or a nickel in the cafeteria. By means of simple posters and illustrative material on the cafeteria bulletin boards, the home economics classes and suggestions from the dietitian and her employees, these pupils are encouraged to bring sandwiches and fruit from home and to supplement them in the cafeteria with

One of the vital problems confronting school luncheon officials throughout the country during these chaotic times is the matter of emergency feeding. In order to render assistance in bringing to light certain facts pertaining to this phase of lunchroom activities, the Editors are planning a series of articles recounting successful endeavors in supplying satisfactory five-cent and ten-cent combination plate luncheons. The personal experiences of cafeteria managers in meeting this demand are solicited

This better shower uses only *Half* the water

Cut your school's bills for water and water heating for showers as much as 50%!

The Refreshor Shower Head, a Crane achievement, will do it!

It gives the sort of shower that Young America likes. Each thread of water comes forth with a zest—clear-cut and splashless . . . no lazy, indifferent flow.

More, the Refreshor need never get clogged up. A simple twist of the shower face (no tools are needed) and the head is opened for instant cleaning.

Replace your present shower heads with the Refreshor and the change will pay for itself over and over again. Any good contractor will tell you how reasonably this Crane shower head is priced.

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VALVES, FITTINGS, FABRICATED PIPE, PUMPS, HEATING AND PLUMBING MATERIAL

THE DAILY FOOD REQUIREMENTS FOR THE GROWING BOY OR GIRL

ONE EGG

ONE QUART MILK

ONE SERVING OF MEAT, FISH OR MEAT EXTENDER

TWO TO FOUR SERVINGS OF VEGETABLES, FRESH OR CANNED

TWO TO FOUR SERVINGS OF FRUIT, FRESH OR CANNED
(AT LEAST ONE SERVING OF FRUIT OR
VEGETABLE SHOULD BE RAW)

ONE SERVING OF BREAKFAST CEREAL

FIVE SLICES, OR MORE, OF BREAD

ONE SERVING, OR MORE, OF POTATO, OR SUBSTITUTE

TWO OUNCES (4 TABLESPOONS) OF FAT (AT LEAST 1 OUNCE
OF IT BUTTER)

A SMALL AMOUNT OF SWEETS—AT THE END OF THE MEAL
NOT BETWEEN MEALS

IN ADDITION TO THESE QUANTITIES, THE FOLLOWING DIETARY FOOD PROPERTIES ARE LISTED:

ENERGY FOODS

Bread, cereals, potatoes, butter and other fats, sweets—
Purpose—To supply fuel to the body. (Ability to work. Promotes muscular activities of the body.)

PROTEIN FOODS

Milk, eggs, cheese, meats, fish, fowl, dried beans and peas—
Purpose—To build and repair the muscles and nerves.

MINERAL FOODS

CALCIUM—Milk and its products, sea foods, citrus fruits, all green and yellow vegetables and tomatoes.
Purpose—To build bones, teeth, muscles and nerves.

PHOSPHORUS—Eggs, sea foods, green and yellow vegetables and tomatoes.
Purpose—Aids the calcium in building the framework of the body.

IRON—Liver, lean beef, sea foods, egg yolk, green vegetables, dried fruits.
Purpose—To make rich, red blood.

VITAMINS

A and B—All cooked and raw vegetables and fruits, milk butter, eggs.
C—All raw vegetables and fruits, especially citrus fruits.
D—Cod liver oil, sunshine.
Purpose—Essential for the health, growth, life of the body, its resistance to disease, and for bone development.

WATER AND BULK

At least eight glasses of water a day are needed as a cleansing agent, and for replacing body liquids lost by evaporation and elimination.
A certain amount of raw and bulky foods should be included in the daily diet to help promote the elimination of body wastes.

Typical pages from the pamphlet which is distributed among the parents as part of Education Week activities.

a hot food, such as soup with saltines, cocoa, a creamed vegetable or a meat substitute.

The penny "nick nacks," such as peanuts, chocolate raisins, milkies and cakes, take very little space on our counters and are placed near the ice cream section where pupils are most apt to pick them up after they have had their lunches. No candy or soft drinks are sold in the cafeteria. Doctor McCollum's adage "eat what you would after you have eaten what you should" is kept constantly before the pupils.

How We Interest Parents

Education Week which comes early in the school year affords our best opportunity for reaching the parents. We send them a folder, typical pages from which are shown here. Many mothers and a few fathers have lunch in the cafeteria during Education Week. The majority of them visit the kitchen and express interest in our work. A few have a definite problem relative to Johnny or Mary and food. The favorite questions are, "How can I get my child to eat certain vegetables?" "My girl never drank milk until she began eating in the cafeteria. How did you do it?"

A folder of bulletin board posters showing girls with beautiful teeth, a nice complexion, pictures and statements of movie heroes, athletes and world heroes, who have attained their glory partly as a result of the drinking of milk and eating of vegetables, is on hand for the occasion. The pictures and articles are fitted together to meet our needs and mounted on colorful poster paper. Daily and Sunday papers and current magazines are extremely good sources for both the pictures and articles.

The menu for the following day is posted so that the home supplements can be made wisely. After talking with mothers we find that many pupils do talk about the lunch they had that day and what they are going to buy tomorrow. Requests come from both pupils and parents for recipes of dishes that have been served in the school cafeteria.

Our dietitians are occasionally asked to speak before parent-teacher groups, alumni meetings, and assembly, or are requested to serve as members of health committees. In this manner further contact is made with the parents of the pupils.

The student council, the student governing body of Eastern High School, is divided into various committees, one of which is the recreation committee. The duties of these girls are to find means of recreation in the auditorium, gymnasium and the cafeteria. As most girls have a free period

FIRST..

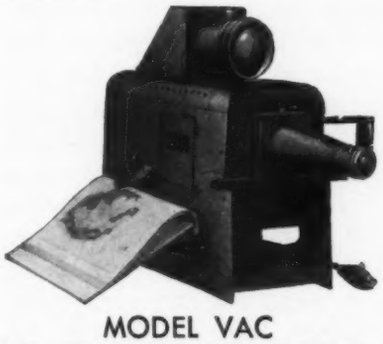
..*It was Toys and Pictures*

Then came reading. But "seeing" is a natural instinct—"reading" is an acquired art. Undoubtedly, this basic fact is the reason children in school learn quicker with visual education—and retain knowledge thus gained, longer.

Actually, the use of Spencer Delineascopes in teaching is taking advantage of students' natural instinct to remember more easily things they "see". There is a Spencer Delineascope to meet every teaching need. Two of our most popular models are shown here. Write for Folder K-77-N which describes our complete series of Classroom Delineascopes.

MODEL B

Designed so that teacher can at all times face the class and at the same time operate the lantern personally. Place a glass-slide on the slide track and the image is projected over your head onto screen. Point out, directly on the slide, what you wish to bring out in your lecture. Image of the pointer appears on the screen.



MODEL VAC

A four-purpose Delineascope for projecting opaque material, glass slides, film-slides and micro-slides. Weighs only 20 lbs. so is easily carried from room to room. Excellent illumination gives brilliant pictures.

Spencer Lens Company
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SPENCER LENS COMPANY, 19 Doat Street, Buffalo, N. Y.

Gentlemen: Please send your folder K-77-N which gives complete description and prices on your classroom Delineascopes.

NAME .....

SCHOOL .....

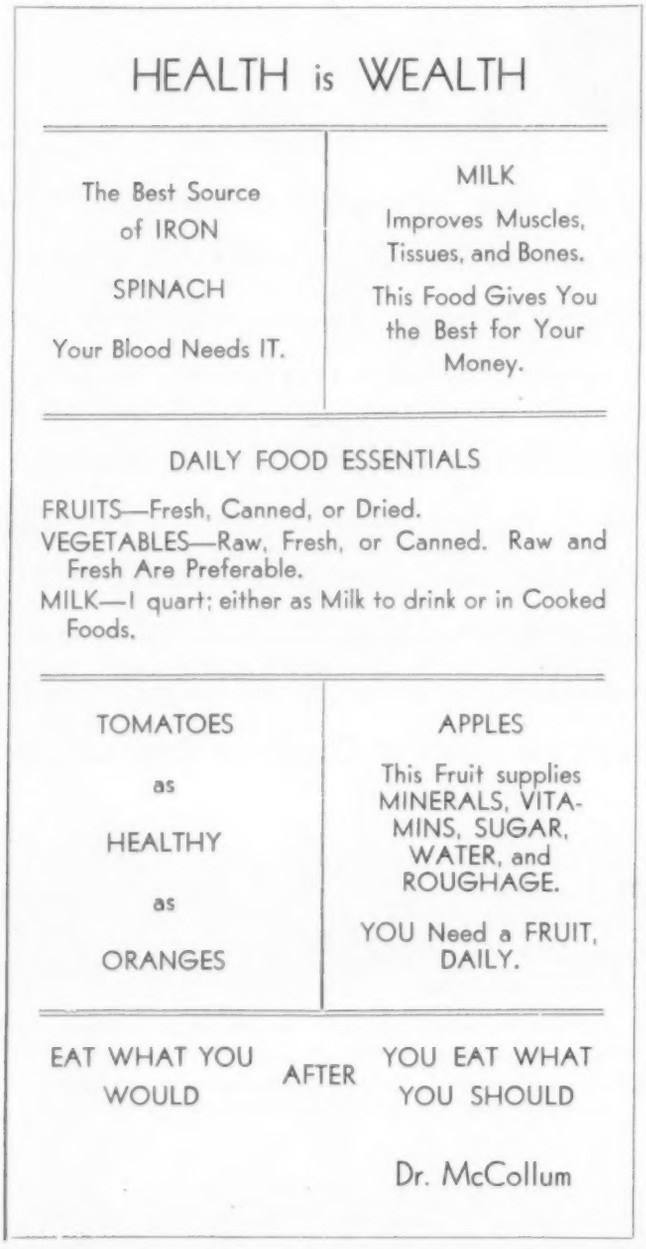
ADDRESS .....

CITY ..... STATE .....

only during their lunch time (forty minutes), the committee has purchased games to be used in the cafeteria. The council buys these games with money obtained by dances, plays and other entertainments.

There are two hostess tables, and each has a cafeteria hostess who is appointed by the council. These girls are in charge of the games, radio, announcements, library permits, cleanliness and conduct in the cafeteria. Each hostess table is provided with a notebook, and the girls taking out the games sign these. When the game is returned, the girl crosses off her name.

Most girls seem to be interested in games that may be played by a large group, such as, Bingo, Old Maid, Authors, Lotto and Anagrams. However, a few like to play with just one or two friends, and these girls choose Checkers, Dominos and Parcheesi. The council finds that these games are really enjoyed, and that through them the girls keep an interest in the cafeteria and are given a quiet means of recreation not annoying to other pupils around them.



A poster designed to help pupils to select food wisely.

WEDNESDAY

Cream of Tomato Soup	5c
Chicken and Noodles	10c
Parsley Carrots	5c
Asparagus	5c
Baked Lima Beans	5c
Hot Plate	10c
Head Lettuce Salad	10c
Cottage Cheese	5c
Combination Fruit Salad	10c
Vegetable Sandwich	5c
Tongue Sandwich	5c
Hot Rolls	2c
Apple Pie	10c
Baked Custard	5c
Fruit Cup	5c

TO SUPPLEMENT THE LUNCH BROUGHT FROM HOME:

AT 5c	AT 10c
A cup of cocoa or milk	Hot plate
A bowl of cream of tomato soup	Cream of tomato soup
Choice of fresh or canned fruits	Baked custard
A serving of buttered asparagus	Milk or cocoa
	Fruit cup

SUGGESTIONS FOR A 15c LUNCH:

Cream of tomato soup
Baked lima beans
Custard

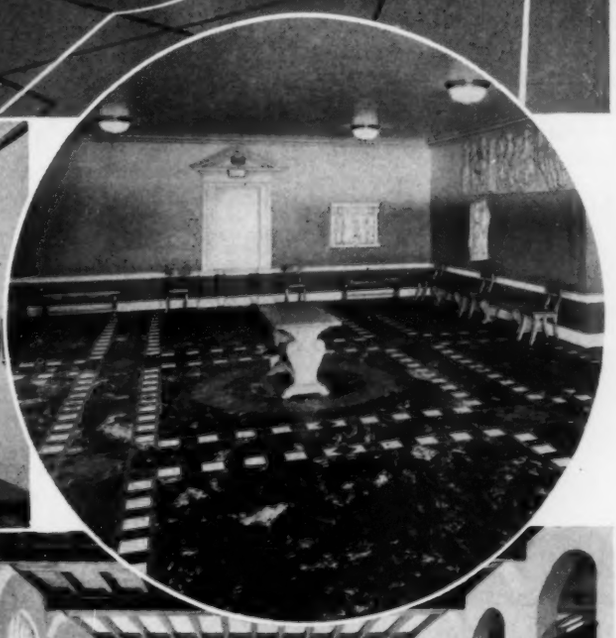
Vegetable sandwich
Cottage cheese
Fruit cup

Milk or cocoa
Hot plate

This is another page from the pamphlet sent to parents, with suggestions pertaining to the school lunch.

How Baltimore Feeds Indigent Pupils

Many indigent children in the elementary schools of Baltimore are being provided with free lunches. This food is prepared in the larger junior and senior high school cafeterias, where there are sufficient space and equipment, and is transported to the different schools. The principal and faculty in the elementary schools take charge of the serving of these lunches. Following are typical menus which range in price from $0.04 to $0.06 per pupil: creamed potatoes and ham, buttered bread, apple; tomato rice soup, meat loaf sandwich, milk; creamed eggs and celery, buttered bread; apple; meat and vegetable stew, buttered bread, milk; corn and potato chowder, bread and butter, orange.



Sealex Clicks on All Six!

Versatile Sealex Linoleum fills individual flooring requirements of six different interiors in Topeka High School, Topeka, Kansas.

Count the photos for yourself. Six of them—with Sealex Floors ranging from an elaborate custom-cut design for the Classic Art Room to the modern, splinter-proof Gymnasium floor above it! Sealex comes in a variety of patterns and weights suitable for any school interior. It is quiet underfoot. Sanitary and inexpensive to maintain. Built to withstand the heaviest traffic. "Bonded Floors" of Sealex Linoleum, installed by authorized contractors, carry a Guaranty Bond covering full value of both workmanship and materials. Write us today—one of our flooring experts will gladly consult with you on new construction or remodeling work.

CONGOLEUM-NAIRN INC., KEARNY, NEW JERSEY

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REG. U. S. PAT. OFF.
FLOORS AND WALLS

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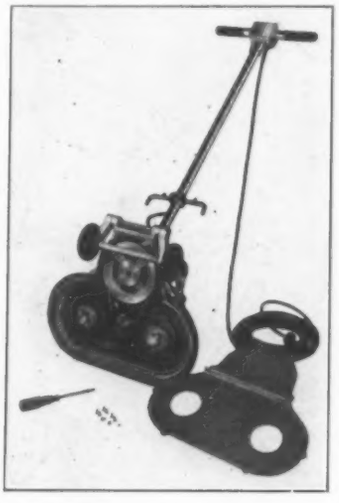
MODERN PRODUCTS *for the* SCHOOL

New Floor Machine Performs Four Tasks

A floor machine that waxes, polishes, scrubs and dry cleans, which sells at a reasonable price, has been placed on the market by General Floorcraft Corporation, New York City. The construction of the machine is simple. Gears, chains, sprockets and transmission grease have been eliminated in its design. This was done, according to the manufacturer, in order to keep



operating costs and maintenance costs low.

Flexibility and balance have been incorporated in the machine so as to promote easy operation. All pressure is concentrated directly over the brushes. Noiseless operation is claimed for this unit by the manufacturer.

The machine is made in three different sizes: 14-inch brush spread, 18-inch brush spread and 22-inch brush spread.

A 35 mm. Portable Projector for Schools

The enjoyment and value of motion pictures are greatly increased by the best possible screen results. The new Simplex Portable 35 mm. Sound Projector has, according to the manufacturer, been designed and constructed to meet the special needs of schools, colleges and moderate size auditoriums.

There are a number of improvements in the sound reproducing system which has been so placed that unnecessary adjustments and the possibility of error are avoided, according to the manufacturer, International Projector Corporation, 88 Gold Street, New York City. A machined, curved plate has been provided in place of the sound "gate." This design, it is claimed, keeps the film in a proper optical plane with relation to the sound reproducing system, and prevents the gathering of emulsion and dirt at this point. The film is laterally guided by the edge on which the sound track appears. The speaker unit is of the electro-dynamic type.

The entire projector mechanism, lamphouse, take-up magazine, motor and sound head are enclosed in a compact carrying case.

Tile Flooring Designed for Extra Heavy Duty

A new heavy duty asphalt tile flooring that is designed for unusually severe service conditions has been announced by Johns-Manville, 22 East Fortieth Street, New York City. The outstanding characteristics of the material, according to the manufacturer, are its resistance to indentation and abrasion, its strength and its ability to withstand exposure to moisture.

This new tile can be applied directly over smooth wood subfloors and may be used for installations at or below grade where dampness may be encountered, it is stated. The tile is made in four colors, black, red, mahogany and brown. It is available in four sizes, one-quarter-inch thick.

Steel Wardrobes Improve Appearance of Building

A recent advancement in school wardrobes is the Gagen cabinet type Allsteel Wardrobe manufactured by General Fireproofing Company, Youngstown, Ohio. The walls, floor and ceiling are all made of steel, electrically welded into a complete sanitary, fireproof and verminproof cabinet.

These wardrobes are designed to be placed on the rough floor. Adjustable jacks in the floor of each cabinet provide for cabinet adjustment to desired height. The recesses in which they are placed need not be plastered.

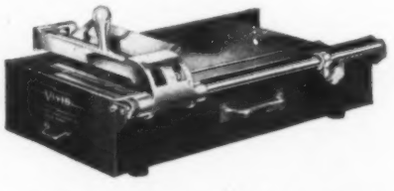
The doors swing back into the cabinet out of the aisle, projecting a maximum of 3½ inches during the movement. Each wardrobe is equipped with two adjustable, slatted shelves and one adjustable coat rack all with hooks. The bottom of the wardrobe is covered with linoleum. A grating in the ceiling and an opening below the bottom of the doors provide ventilation.

A Duplicating Machine for Small Users

There are many uses for duplicating machines in schools. They may be used to prepare examination papers, project work, silent reading seat work tests, drawings, charts and graphs, office forms, school papers and bulletins and notices to teachers and pupils.

A low priced duplicating machine especially designed for small users has been announced by L C Smith & Corona Typewriters Inc., Syracuse, N. Y. The Vivid Junior is equipped with the "floating carriage" found in the company's most expensive models, and it employs the new Vivid "Dupli-Pad."

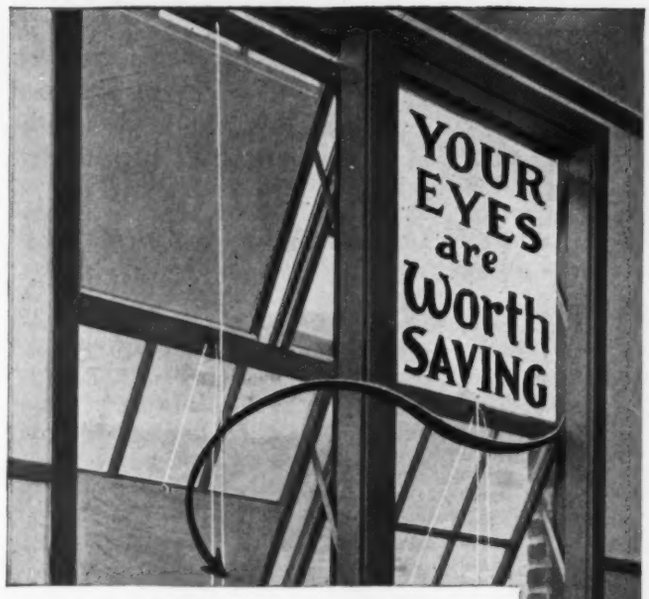
Making reproductions with the machine is a simple process. The first



step is to prepare an original or master copy. Next, a Dupli-Pad is inserted on to the bed plate of the machine. The ink is then transferred from the master to the Dupli-Pad, and the machine is ready for use.

The machine reproduces in one operation all of the various colors that may be used in preparing the master copy. Handwriting, pen or pencil sketches, typewriting, lines and cuts may be reproduced in the same operation.

The same company has also announced a compact, portable duplicating machine, called the Vivid Dupli-Kit. This machine is contained in a small carrying case and may easily be moved from one place to another as needed. For the teacher, it provides a speedy and economical method of producing printed seat work tests, music scores, maps, graphs and other schoolroom work, the manufacturer points out. A feature of the machine is the low price for which it is sold.



Forse Window Shades

Forse shades, used in schools for twenty years, are made in ten different styles. Many rural schools use the Forse folding shade without spring rollers. Others prefer our single roller adjustable or the "upside down" shade. The finest of all is the Forse Duo-Roll, used in beautiful modern buildings. Forse Greytone fabric is soft finish, rich looking and truly wear-proof. For dark rooms, laboratories, Forse Nelux opaque is preferred. Special brackets and fixtures. Forse shades fit any window. Samples, estimates and suggestions upon request.

FORSE MFG. CO., 500 West St., ANDERSON, IND.

THE AMERICAN SANDERPLANE

● Here is a great labor and time saver—A money maker for every school.

This electrically driven Sanderplane replaces the old slow hand plane wherever used, sanding down the work smooth as a table top without plane marks or other imperfections. Exceedingly fine for refinishing school desks, black boards and general carpenter work.

MANUAL TRAINING TEACHERS—Get this machine in the hands of your students and teach them up-to-date methods—The old hand plane that our great grandfathers used is in the discard.

Write immediately for price and complete information on the latest improved machine having dust collector and centrally located motor insuring perfect balancing of machine and smooth uniform work.

THE AMERICAN FLOOR SURFACING MACHINE COMPANY
532 South St. Clair Street
TOLEDO, OHIO

Stop It Quick!

with

Queen FIRE EXTINGUISHERS
FOR EVERY FIRE HAZARD

DON'T give fire a chance to get started. Protect your property and guard lives, by installing Queen Fire Extinguishers and Equipment. Strong, quick, easy action. Leaders for 25 years. Approved by Underwriters' Laboratories, Inc.

Extinguishers and Parts for Every Purpose

Check up today on your equipment. Write us for recommendations and prices on new equipment, parts or refills. No obligation.

HARKER MFG. CO.

Dept. NS-5, 121-123 W. Third Street, Cincinnati, Ohio

***Safety Supplies*—Gas Masks, Respirators, Goggles, etc.**

Here's what we mean by a SCHOOL *bath towel . . .*

DESIGNED with an eye on school needs — heavily constructed with woven tape selvages and woven tape strips between each rib of terry — double thread weave using TWO-PLY yarn — fluffy, absorbent, yet tough and durable and without a single weak spot.

The SUPER-GYM towel is 20x40 in size and weighs a full half pound. You can get five or six years wear out of it. Your towel costs can be cut down below any economy you've ever known.

Schools like the SUPER-GYM—because it's a school towel.

WRITE FOR A SAMPLE

Test it out—stretch it, try to tear it, wash it. The SUPER-GYM can be woven with your name. Write for prices. Learn about this real "athletic" towel and why no other product is comparable in strength or as economical in cost.

GEO. McARTHUR & SONS
Baraboo Towel Mills
Manufacturers
BARABOO : : : : WISCONSIN

A Small Ice Cream Freezer for Schools

The Taylor Freezer Corporation, Beloit, Wis., manufacturer of ice cream making and hardening equipment, has expanded its line to include a 2½-gallon freezer. The new unit is designed for users whose ice cream and sherbert consumption is 35 or 40 gallons a day.

The freezing unit of the 2½-gallon model is equipped with the regular features of the firm's other models. In addition, the expansion chamber of this unit has been especially arranged so as to provide maximum cooling efficiency when used with small ice machines. For example, the unit operates efficiently in

conjunction with a one-horsepower motor, according to the manufacturer, thus giving it an added feature of economy. With a 1½-horsepower compressor, the rate of freezing is naturally increased.

An improved quality of ice cream at a large saving in cost is the claim set forth by the manufacturer. The corporation's complete line consists of 1, 2½, 3 and 5-gallon freezers, together with 20, 40, 60 and 80-gallon hardening cabinets, with various combinations.

Tenderizing Device Cuts Meat Costs

A scientifically designed device for severing into short pieces the tough, sinewy fibers that are present in low cost meats is announced by Kellogg and Tree, 300 Madison Avenue, New York City.

The Tenderette is exceedingly simple to use. The meat is placed on the round turntable of the machine and the handle, which carries the tenderizing blades, is pressed down, thereby forcing the blades into the meat. The handle is then repeatedly swung over the entire surface of the meat so as to cut the fibers from various angles.

This severing process does not break the juice pockets or force the juice from the meat, it is claimed. All of the less expensive cuts of beef, pork and veal may thus be tenderized.

The manufacturer gives the following as an example of the savings possible with this machine: "A sirloin steak will cost, on the average $0.28 a pound. A chuck steak that can be tenderized will cost only $0.15 a pound, resulting in a saving of $0.13 a pound, or 46 per cent."

Low Cost Fire Alarm Is Easy to Install

In spite of the fact that the average public school is supposed to be fireproof, many fires occur every year with complete loss of building and contents and in many cases lives are lost. Most fires in public schools start in the basement near the heating plant, or in places where waste paper and other rubbish are stored.

"Fire-Cry," an automatic fire alarm made by Fire-Cry Company, Dayton, Ohio, is a device which sends out a loud warning sound just as soon as the temperature near-by rises to a dangerous point. The unit measures 4 inches

by 7½ inches, and is complete in itself. It operates with a powerful motor spring. When the temperature rises to a danger point the wax fuse melts and releases the clocklike mechanism, which causes the fire gong to sound loudly for a period of approximately ten minutes.

The unit can be quickly installed any place in the building where the fire hazard is greatest. There is no maintenance required after installation, and the unit sells at a low price.

Oil Water Heater Burns Cheap Fuel

An oil furnace for commercial water heating, the G-E Oil Furnace, has been placed on the market by General Electric Company, Schenectady, N. Y. The furnace is designed to burn low priced fuel (light industrial fuel oil). The furnace is completely automatic in operation.

Many Advantages Claimed for New Fumigating Gas

The word "fumigant" has in the past usually suggested bad-smelling, poisonous and objectionable materials, but now this word takes on a new and much more pleasant meaning with the introduction of Malium, a new fumigating gas, according to the manufacturer, the Michigan Alkali Company, 10 East Fortieth Street, New York City. Malium, it is claimed, is a clean, noninflammable gas with no unpleasant or persistent odor, designed to destroy insect life.

There are many uses for such a product in schools. Woolen athletic clothing, blankets, leather goods and similar items in storage rooms require protection against destruction by insect life. It is often necessary to fumigate kitchens, gymnasium locker rooms and other sections of the school. Single rooms, it is claimed, may be treated with this gas without disturbing occupants in adjoining rooms.

The gas is compressed into cylinders of various sizes. The valve is turned, the gas released, and the fumigation is on.

Educational Films

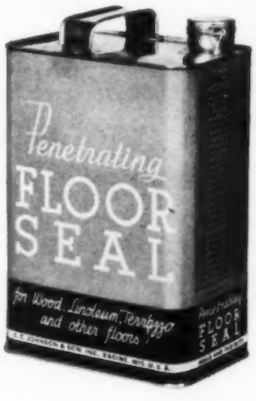
Erpi Educational Films, including those made at the University of Chicago, are being released on 16 mm. sound-on-film reels by the Victor Animatograph Corporation, 242 West Fifty-Fifth Street, New York City.

The series now available consists of such subjects as: music, physics, vocational guidance, mathematics, elementary school science, and training films for parents and teachers.

New Trade Pamphlets

South Bend Lathe Works—"The School Shop" is the title of a fifty-page booklet that has just been published by South Bend Lathe Works, 434 East Madison Street, South Bend, Ind., for free distribution to school executives and instructors. The purpose of the booklet is described in the Foreword in these words: "The ideas expressed in this book covering methods of shop training are not entirely our own but are the best ideas, in our opinion, that have been brought out and developed by the various schools all over the country." The book is well illustrated with photographs and drawings showing the layout of these various school shops.

Why more schools are protecting floors with JOHNSON'S *Penetrating* FLOOR SEAL



• Johnson's Penetrating Floor Seal for wood, terrazzo, cement, linoleum and other floor surfaces. Do not use on asphalt base or rubber.

• There are five reasons why schools that have tried this new Penetrating Floor Seal are continuing to use it. There really is a sixth reason—which you will appreciate particularly at this time. The seal is low in cost, and enables you to do a good floor maintenance job within a very limited budget.

Here are the five reasons—which you can test for yourself by sending the coupon below for a full size free can of Johnson's Penetrating Floor Seal:

1 Goes on quickly with mop or brush. 2 Penetrates just the right depth to bond the surface. 3 Forms a hard, durable seal that keeps soil, moisture and stains out. 4 Does not attract or collect dust and dirt. 5 May be used as a sole floor maintenance material, or as an efficient base for Johnson's Traffic Wax or No Buff Floor Finish.

This new seal is not a wax. Not a water emulsion finish. It is a new product created in the Johnson Laboratories, where a great many floor maintenance problems have been solved during the past 40 years.

Send in the coupon and give this new floor seal a trial at our expense.

SEE JOHNSON'S DEMONSTRATING TRUCK

Six of these demonstration trucks are now on the road. They are completely equipped to show methods of floor maintenance—how best to apply Johnson's Traffic Wax, No Buff Floor Finish, Penetrating Floor Seal—actual demonstration on various types of flooring.

TEST SAMPLE FREE!... USE COUPON

• S. C. Johnson & Son, Inc., Dept. NS-5, Racine, Wisconsin. Please send me a full size free can of your new Johnson's Penetrating Floor Seal.

Name_____ Title_____

Name of School_____

Address_____

City_____ State_____

THE NEWS OF THE MONTH

Teaching Aid Resumed After Six Years' Absence

"Criticism, Suggestion and Advice," an eight-page bulletin of comment on advertisements, articles and stories in the *Saturday Evening Post*, will be brought back into teaching service in October by the faculty of the college of business administration, Boston University, after six years of inactivity. Judging from requests received in advance of publication no less than 149 instructors in advertising, marketing, economics and allied subjects in seventy-eight colleges and universities will use the bulletin for classroom or home study material.

Prof. Charles E. Bellatty, head of the department of advertising at Boston University, will continue as editor. Everett W. Lord, dean; Prof. Harry B. Center, head of the department of journalism, and other members of the faculty will contribute reviews, comments and questions.

The little publication will appear semimonthly during the next college year. School superintendents who wish to use the bulletin should communicate with Prof. Bellatty at 525 Boylston Street, Boston. The first issue will appear on October 6.

Pennsylvania Marks 100th Year of Free Schools

The one-hundredth anniversary of the signing of the Free School Law in Pennsylvania is being observed this spring by the 12,000 public schools and 2,000,000 pupils in the state. The centennial observance received an official start during the week beginning April 1 which was set aside as Pennsylvania Education Week through an official proclamation by Governor Gifford Pinchot.

Recognition of the centennial was made by the department of public instruction in a two-day series of programs given in the forum of the Education Building at Harrisburg, April 3 and 4. Statewide observance of the centennial will close with the annual Education Congress in Harrisburg on October 10 and 11. This occasion will be featured by a Citizens' Conference on Education to which schoolmen and friends of education throughout the state are to be invited.

Programs sponsored by the department of public instruction during Pennsylvania Education Week were attended by approximately 4,500 persons. Four sessions were held during which programs were presented for the purpose of showing conditions and incidents leading up to the establishment of free public schools. Events presented as a tribute to traditional customs of years gone by included an old-fashioned spelling bee and singing school. Pageants showed the contrast of instructional methods of one hundred years ago compared with those of modern schools.

The centennial celebration in the public schools will continue through the spring months and in many schools a definite objective will be attained by making the anniversary the theme for commencement and promotional exercises in June. In scores of communities special demonstrations and pageants are planned.

Acquire Long & Smith's College Department

Farrar & Rinehart have acquired the college department of Long & Smith and are immediately adding this list to their own. On April 2 Farrar & Rinehart published their first two college texts, "Modern English Readings," a college anthology, edited by Prof. Roger Sherman Loomis and Prof. Donald Lemen Clark of Columbia University and "The American School System" by Prof. Aubrey A. Douglass of Claremont Colleges.

Syracuse U. Establishes School of Education

Syracuse University announces the establishment of a school of education to absorb the present Teachers College of Syracuse University and take charge of all teacher training in the institution.

The faculty of the school will consist of thirty-five or forty members, including approximately twelve from the college of liberal arts, ten from the present Teachers College and the balance from the other colleges and schools in which prospective teachers are enrolled, as for instance the college of fine arts, the college of home economics, the college of applied science, the college of business administration, and the school of public speech and the dramatic arts.

The work of the current year will be carried on under the present organization of Teachers College and its present relationship to the other colleges of the university will continue throughout the academic year.

Crisis in Education Discussed by Laymen

George F. Zook, U. S. commissioner of education, was among the speakers at a citizens' conference on the crisis in education held recently in Columbus, Ohio. The meeting was called by educators to provide the layman with an opportunity to protest a "sacrifice of educational opportunities that threatens the democratic structures of American society."

Paul V. McNutt, governor of Indiana, and Dr. Glenn Frank, president of the University of Wisconsin, were the principal speakers in the opening session which was presided over by George White, governor of Ohio.

Cubberley Gives Life Earnings to Education

A gift unique in the annals of American universities was announced in the recently published president's report of Stanford University. The Ellwood and Helen Cubberley Trust Fund of nearly $400,000 has been established by Ellwood Patterson Cubberley, dean emeritus of the Stanford school of education, representing his lifetime earnings largely in the field of authorship in education.

It is the intent of the donors, when the principal of the trust becomes valuable enough, to have it devoted to four main purposes: first, to erect a building for the school of education; second, to endow the chair which Doctor Cubberley held for thirty-five years; third, to add to the Cubberley Lecture Fund, created by a national committee, headed by the late Henry M. Suzzalo, on the occasion of the dean's retirement last June, sufficient funds to bring that up to $20,000 if the committee has not achieved that end within a reasonable time, and fourth, to provide a special endowment with which to purchase books for the school of education library.

Purifies as It Cleans

Thoroughly efficient cleaning involves more than merely removing dirt which is apparent to the eye. It means the removal of invisible films which breed bacteria and throw off unpleasant odors.

Because it produces this truly sanitary cleanliness, Wyandotte Detergent is widely used by those who study maintenance cleaning and to whom efficient cleaning is more important than any other consideration.

Wyandotte has been scientifically developed to do all kinds of maintenance cleaning. Wyandotte cleans paint safely, renewing the glossy surface. It cleans porcelain, tile and enamel surfaces without scratching or marring. It removes stains from fine marble. It cleans floors thoroughly and leaves them non-slippery.

Try Wyandotte today. Your jobber will be glad to supply you. For detailed information, write—

Wyandotte Detergent

THE J. B. FORD COMPANY • WYANDOTTE, MICHIGAN

THE NEWS OF THE MONTH

Council Approves Thirty Colleges and Universities

Thirty institutions of higher learning have been approved by the jury appointed by the American Council on Education as being adequately staffed and equipped for work leading to the doctorate in education. These findings have been published in "The Educational Record" as of April, 1934.

The following graduate schools of education are included in this list. Those which the committee considered most distinguished are indicated by an asterisk: Boston University, *Columbia University, Cornell University, George Peabody College for Teachers, *Harvard University, Radcliffe College, Indiana University, Johns Hopkins University, New York University, Northwestern University, *Ohio State University, Pennsylvania State College, *Stanford University, *University of California, *University of Chicago, University of Cincinnati, University of Illinois, *University of Iowa, University of Kansas, *University of Michigan, *University of Minnesota, University of Missouri, University of Nebraska, University of North Carolina, University of Pennsylvania, University of Pittsburgh, University of Southern California, University of Texas, University of Washington, University of Wisconsin and *Yale.

New Volume Deals With College Building Planning

As an aid to scientific determination of principles and standards for the construction of college and university buildings, a new treatise has been issued by the bureau of cooperative research of the school of education, Indiana University, on the subject, "Bibliography of College and University Buildings, Grounds and Equipment." The joint authors are Dean H. L. Smith, school of education, and Dr. F. R. Noffsinger, a member of the education staff.

The new volume covers an exhaustive study and classification of material on university and college buildings published in more than 150 educational journals and publications relating to the building trade.

Among the separate phases of the subject which are covered are the following: architectural services and the architect, construction services and the contractor, the campus and campus planning, space provisions and their layout and equipment, mechanical equipment, acoustics of college buildings, maintenance and operation, and college and university buildings of other countries.

Vocational Agricultural Supervisors Hold Meetings

The seventeenth annual conference of State Supervisors and Teacher Trainers in Agricultural Education in the North Central Region was held during the first two weeks in April. For the first time this conference resolved itself into sectional meetings, the first being held in St. Joseph, Mo., the second at Ortonville, Minn., and the third at Indianapolis.

The conference was called by J. A. Linke, agricultural agent, U. S. Office of Education. The program was under the general direction of a program committee of which R. W. Gregory, Purdue University, is chairman. Other members of the committee are H. E. Bradford, University of Nebraska; A. M. Field, University of Minnesota; Ray Fife, Ohio State Education Department; H. M. Hamlin, Iowa State College, Ames; B. A. Walpole, Michigan State College, East Lansing; Carsie Hammonds, University of Kentucky, and C. L. Angerer, Missouri State Education Department.

The program featured five general fields of effort, namely, teacher training; administration and supervision; emergency problems; the future farmers of America movement, and teacher problems.

Speakers at the conference included Dr. C. H. Lane, chief, agricultural education service, U. S. Office of Education; J. H. Pierson, specialist, U. S. Office of Education; Dr. L. S. Ellis, Education Department, Farm Credit Administration.

Michigan Education Association Names Committee to Consider Changing Constitution

Harold Steele, superintendent of schools, Jackson, Mich., was named president-elect of the Michigan Education Association at its annual representative assembly, held recently. Edith M. Bader, assistant to the superintendent of schools, Ann Arbor, was elected vice president. Charles A. Everest, principal of Union High School, Grand Rapids, and Ottilia M. Frisch, school commissioner of Saginaw County, were chosen directors-at-large for three years. The terms of the newly elected officers start on July 1, 1934.

A constitutional committee to consider revision of the present constitution of the association was authorized by the representative assembly. The plan, as recommended by the board of directors, is that the committee shall be composed of one representative from each of the eight districts, to be elected by the 1934 representative assembly delegates from the districts, two members from the board of directors, three members-at-large chosen by the board of directors, and from three to five advisory members chosen by the board to furnish expert advice on legal documentation, organization, and technique of cooperative thinking. The committee is instructed to do the following things:

1. To provide a machinery of discussion to be participated in by members of the association in each district.
2. To formulate guides for the study and discussion of the question of constitutional revision in each district.
3. To assemble the results of district discussion and draft a constitution.
4. This committee shall be organized before July 1, 1934. It shall have brought about the district organization for district discussion by September. The reports of all district discussion shall be submitted to the committee by January 1, 1935. The constitutional committee report, which shall be the revised constitution, shall be ready and in the hands of delegates to the representative assembly at least thirty days before the assembly.
5. To be guided by two fundamental principles: first, an effective functional organization of the association; second, that the revised constitution shall provide for continued growth of all members of the association through active participation in its affairs.

"Sit up straight, children!

—but how can they, for hours and hours?

Educators need not be told of the bad effects of carelessly designed seating; what a strain it is on young bodies; how it causes restlessness and inattentiveness. They know that good posture, free, easy, *comfortable* posture helps keep children's minds off the urge to get out in the open—helps keep their attention on their studies.

In all the large selection of Heywood-Wakefield school furniture, correct posture has been given most careful study. Each seat in a wide choice of types and sizes is specially designed for a maximum of comfort.

SALES OFFICES: Baltimore, Md.; Boston, Mass.; Buffalo, N. Y.; Los Angeles, Calif.; New York, N. Y.; Philadelphia, Pa.; Cleveland, Ohio; Richmond, Va.; Tampa, Fla.; Pittsburgh, Pa.; Savannah, Ga.; Raleigh, N. C.; Houston, Texas; St. Louis, Mo.; Birmingham, Ala.; Minneapolis, Minn.; Indianapolis, Ind.; New Orleans, La.; Oklahoma City, Okla.; San Francisco, Calif.; Seattle, Wash.; Chicago, Ill.; Spokane, Wash.; Portland, Ore.; Denver, Colo.

HEYWOOD-WAKEFIELD
SCHOOL FURNITURE

"RECOMMEND HIGHLY for SCHOOL PURPOSES"

Writes Saint John Academy, Indianapolis, Indiana. "More than pleased with Mastipave in our library. In our school of over 350 pupils the room is in constant use . . . received only ordinary care . . . still retains polish given when laid over 18 months ago. We highly recommend Mastipave for school purposes." Economical to install . . . easy to maintain . . . this rot-proof, vermin-proof, water-proof floor covering is giving similar satisfactory service in a multitude of heavy-traffic school and public rooms. Write for booklet "NS."

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475 Brannan St., San Francisco, Calif.

THE COTT-A-LAP CO.
Somerville, New Jersey

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PABCO PRODUCTS

THE LOW-COST, LONG-LIFE FLOOR COVERING

MASTIPAVE

THE NEWS OF THE MONTH

Oregon Plans Conference on Higher Education

A conference on higher education, which will bring together leaders from the college and university fields and experts in business and industry who see the need for new evaluation of social attitudes and institutions, will be held at the University of Oregon on May 18 and 19.

Cooperation of Dr. W. J. Kerr, chancellor of higher education for Oregon, and officials of the state system of higher education has been obtained for the conference. The participation of all educational institutions throughout the Northwest will be enlisted. The conference, believed to be the first called for such a purpose, will bring together a number of nationally known experts who have been extended invitations to attend the event.

Three main lines of thought and study will be taken up at the sessions. The first will be the exposition and discussion of views from outside the education field on current social movements. The second phase will be the consideration of the significance of education, and particularly for higher education, of social changes as presented by men selected from educational and other fields. The third phase will be a thorough study and evaluation of efforts now being made in colleges to meet the needs of the present.

Pupils Complete Payment on $36,000 Memorial Organ

A dedicatory program was staged on March 9 by Central High School, Tulsa, Okla., to mark the successful conclusion of payments on the school's $36,000, student-purchased memorial organ.

Central High School's 4,000 pupils, as well as patrons, Tulsa musicians, representatives of the last ten graduating classes and members of the board of education, attended the assembly.

In 1924, Dr. Merle C. Prunty, present superintendent of schools in Tulsa, then principal of Central High School, proposed that the graduating classes, beginning that year, should combine their gifts to secure a memorial of living and enduring value, and suggested that the remembrance be a pipe organ. The plan caught the imagination of the pupils and by 1927 sufficient funds had been accumulated through the gifts of classes and school organizations to warrant the purchase of the organ.

"Hobart Plan" Is Given Final Approval

Final approval of the "Hobart Plan" for revising the college calendar year, and announcement that Hobart College and William Smith College will operate under the new schedule during the college year 1934-35, have been made by Murray Bartlett, president of Hobart College. Doctor Bartlett's announcement followed meetings of the board of trustees, the faculty, the students and the alumni. Almost unanimous approval of the plan was expressed by every group.

The new calendar is aimed to increase the efficiency of both teachers and students during a given period by eliminating long breaks within the semester, particularly when such breaks come immediately before examination or review periods, as in the case of the Christmas recess in the generally accepted college calendar.

Under the "Hobart Plan," the two colleges will open next year sometime within the week immediately following Labor Day and will continue in session, with only a short break at Thanksgiving time, until December 22 when the first semester will be concluded. There will follow an extended vacation of from three to four weeks, after which the second semester will begin. This semester will also run without any prolonged breaks until late in May when it will be concluded by commencement about May 27.

Educational Buyers Association Meets

Subjects such as specialization in cleaning jobs, air conditioning and the manufacturing processes and uses of paper were discussed at the convention of the Educational Buyers Association, held April 5 and 6 at Miami University, Oxford, Ohio. The convention was attended by seventy representatives of the association's member institutions.

Coming Meetings

May 9-12—National Conference on Education of Negroes, Washington, D. C.

May 10-11—Association of University and College Business Officers, Lawrence, Kan.

May 11-12—Connecticut State Teachers Association regional conference under auspices of Progressive Education Association, Hartford.

May 13-19—National Congress of Parents and Teachers, Des Moines, Iowa.

June 6-7—Indiana County Superintendents Association, Indianapolis.

June 18-23—Section Q, American Association for the Advancement of Science, Berkeley, Calif.

June 19-21—Iowa Conference on Child Development and Parent Education, Iowa City.

June 27-28—Conference on Business Education, University of Chicago.

June 30-July 6—National Education Association, Washington, D. C.

Aug. 1-3—Superintendents' Conference, State College, Pa.

Sept. 3-6—American Public Health Association, Pasadena, Calif.

Sept. 24-26—New York State Council of City and Village Superintendents, New York City.

Oct. 5-6—Colorado Education Association, Durango.

Oct. 8-11—National Council on Schoolhouse Construction, Washington, D. C.

Oct. 10-11—Education Congress, Harrisburg, Pa.

Oct. 15-16—Washington Education Association, Spokane and Walla Walla.

Oct. 18-19—Indiana State Teachers Association, Indianapolis.

Oct. 18-19—Washington Education Association, Wenatchee and Yakima.

Oct. 22-23—Washington Education Association, Centralia and Longview.

Oct. 25-26—Washington Education Association, Bellingham, Seattle and Tacoma.

Oct. 25-27—West Virginia State Education Association, Parkersburg.

Oct. 25-27—Utah Education Association, Salt Lake City.

Oct. 26-27—Maryland State Teachers Association, Baltimore.

Nov. 1-3—Kansas State Teachers Association, Kansas City, Topeka, Salina, Hays, Dodge City, Hutchinson, and Chanute.

Nov. 1-3—Wisconsin Teachers Association, Milwaukee.

Nov. 1-3—Minnesota Education Association, Minneapolis.

Nov. 8-10—Missouri State Teachers Association, Kansas City.

Nov. 8-10—Colorado Education Association, Denver, Pueblo and Grand Junction.

Nov. 25-28—South Dakota Education Association, Huron.

Nov. 27-30—Virginia Education Association, Richmond.

Nov. 29-Dec. 1—Texas State Teachers Association, Galveston.

Dec. 5-8—American Vocational Association, Pittsburgh.

Dec. 19-21—New York State Association of District Superintendents, New York City.

Dec. 26-28—Pennsylvania State Education Association, Harrisburg.

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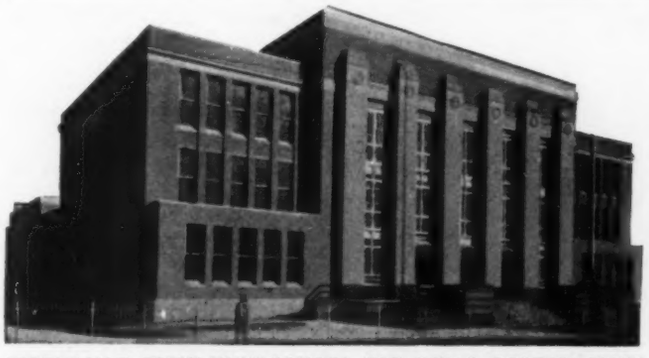

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IN THE EDUCATIONAL FIELD

Eastern States

H. E. BRUMBAUGH has been appointed superintendent of schools in Westmoreland County, Pennsylvania. MR. BRUMBAUGH fills the post formerly held by J. NELSON MOWLS.

E. E. MARVIN has been elected superintendent of schools, Tioga County, Pennsylvania, succeeding J. G. MARCH.

WILLIAM H. HALL, superintendent of schools, West Hartford, Conn., for twenty-five years and superintendent emeritus for the past twelve years, died recently. MR. HALL was eighty-eight years old and had been active in educational work for more than sixty years.

DR. JOHN MCNEILL has been appointed principal of Erasmus Hall High School, Brooklyn, N. Y., succeeding DR. J. HERBERT LOW, who retired on January 31.

RALPH E. NOBLE, principal of People's Academy, Morrisville, Vt., has been appointed superintendent of the Rutland and Fair Haven (Vermont) school district, succeeding SARAH T. LEAVENWORTH, who has resigned after many years' service.

JOHN G. ROSSMAN, superintendent of schools at East Chicago, Ind., has been selected to head the school system at Warren, Pa., succeeding P. M. W. PRESSEL.

W. B. ANDREWS has been named principal of Owen D. Young School, Van Hornesville, N. Y., succeeding MAURICE S. HAMMOND, resigned.

DENTON M. ALBRIGHT, superintendent of schools, Rochester, Pa., has been elected head of the school system at Lewiston, Pa.

MARGARET KNOX, principal of Public School No. 15, New York City, died as the result of an injury by an automobile. MISS KNOX had served as principal of the school since 1901.

O. G. F. BONNERT, assistant superintendent for the past eighteen years, has been elected superintendent of schools in Elk County, Pennsylvania, succeeding DR. J. W. SWEENEY, who has reached the retirement age.

FLOYD E. ANDERSON, principal of Attica High School, Attica, N. Y., died recently.

FRANCES H. SIDWELL, co-principal with her husband, THOMAS W. SIDWELL, of Sidwell's Friends School, Washington, D. C., an institution catering especially to children of foreign diplomats, died recently. MRS. SIDWELL was seventy-two years old.

GEORGE W. FEASER, principal of the high school at Middletown, Pa., has been elected superintendent of the Middletown school district, succeeding H. J. WICKEY who will retire on July 1.

EVERETT G. SHERWIN, assistant principal of the High School of Commerce, Worcester, Mass., has been named principal of North High School, Worcester, succeeding the late ROBERT T. ELLIOTT.

R. G. MOWERY has been appointed superintendent of schools, Franklin County, Pennsylvania, and will assume office on July 2.

WILBUR LONG has been re-elected superintendent of schools, Jeannette, Pa. This is MR. LONG'S fifth consecutive term of four years.

EDWIN H. KEHRLI has been elected superintendent of schools, Wyoming County, Pennsylvania, succeeding the late JOHN E. MORGAN.

WILSON PARKHILL, assistant headmaster of Lawrence Smith School, has been appointed headmaster of Collegiate School, New York City. Collegiate School celebrated its 300th anniversary last year.

GUY N. HARTMAN has been elected superintendent of schools, Somerset County, Pennsylvania, succeeding W. H. KRETCHMAN, who has held the position for the past twelve years.

HORACE M. PERRY, principal of the upper school of Woodmere Academy, Woodmere, L. I., N. Y., has been appointed director of the academy. He succeeds THOMAS M. BARROWS who has resigned.

MARY MCANDREW is the newly elected superintendent of schools at Carbondale, Pa. MISS MCANDREW will assume her new duties on July 2, succeeding JAMES J. CRANE.

THOMAS G. WAGNER, superintendent of schools, Croton-on-Hudson, N. Y., has been elected superintendent of schools of the second supervisory school district, Westchester County, to succeed CHARLES H. CHENEY, who has resigned after twenty-five years of service.

CHARLES E. HILBISH, for the past seven years second assistant superintendent of schools, Northumberland County, Pennsylvania, has been elected superintendent, succeeding GEORGE L. SWANK.

F. A. FREAR has been elected superintendent of schools, Susquehanna County, Pennsylvania, succeeding F. H. TAYLOR, who has held the post for the past sixteen years.

LOUIS F. HACKEMANN, dean of Lenoir-Rhyne College, Hickory, N. C., has been named headmaster of Allentown Preparatory School, Allentown, Pa.

EDWIN H. REEDER, who has been teaching in the education department of the University of Vermont while on leave of absence from Teachers College, Columbia University, has resigned from the latter institution and has been appointed associate professor of education at the University of Vermont.

CHARLES C. MADEIRA, superintendent of schools at Gloucester, N. J., has been selected to head the school system at Sunbury, Pa., effective July 2, succeeding JOHN E. SHAMBACH.

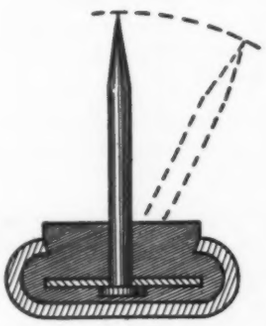
DR. JOSEPH C. MYER, dean of the school of commerce, St. John's University, Brooklyn, N. Y., died April 5 at the age of forty-one. DOCTOR MYER organized the school of commerce in May, 1927, afterward becoming its head.

Western States

PAUL F. GAISER, principal of the Senior High School, Vancouver, Wash., has been appointed superintendent of schools to succeed DEGARIS REEVES, who has resigned after four years of service.

E. N. FREEMAN has tendered his resignation as superintendent of schools, Wheatridge, Colo., effective September 1. PAUL C. STEVENS will be the new superintendent.

DR. THOMAS RUSSELL GARTH, professor of experimental psychology at the University of Denver, has been given a sum of money by the committee of grants-in-aid of the Social Science



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IN THE EDUCATIONAL FIELD

Research Council and by the University of Denver, for use in 1934-35, with which to complete his study of the intelligence of foster Indian children in white homes.

H. T. HATCH has been named to succeed V. M. ROGERS as superintendent of schools, Gunnison, Colo. MR. ROGERS has been appointed superintendent of schools at Boulder, Colo.

DR. CAMILLE EUGENE WERLING, head of the French department of the University of Denver, has been granted the diploma of "Officier d'Académie" by the French government.

C. D. CARTER has been named to succeed A. H. DIXON as superintendent of schools at Torrington, Wyo. MR. CARTER has been head of the school system at Dorchester, Neb., for the past four years.

Middle Western States

EVERETT C. HIRSCH, superintendent of schools at Rice Lake, Wis., has been named superintendent at Wausau, Wis., succeeding S. B. TOBEY, effective July 1.

IVAN E. NOBLITT has been named superintendent of schools, Milltown, Ind., for the remainder of the school term, to fill the vacancy created by the death of JOSEPH O. FERGUSON.

PROF. MELVIN L. ENGER has been named dean of the college of engineering and director of the engineering experiment station at the University of Illinois. ARTHUR CUTTS WILLARD, newly elected president of the university, has been serving as acting dean of the university's engineering college this year.

C. W. BREMER, superintendent of schools, Wakefield, Mich., has been named school superintendent at St. Johns, Mich.

FORREST R. CALDWELL, superintendent of schools, Paoli, Ind., for the past five years, has been appointed head of the school system at Mooresville, Ind., succeeding L. L. COOK, resigned. CHARLES L. STALCUP is the new superintendent at Paoli.

C. R. HEEMSTRA, superintendent of schools, Croswell, Mich., for the past ten years, has been appointed head of the school system at Fenton, Mich., succeeding W. J. BURKETT. STANLEY L. BENJAMIN, superintendent at Carsonville, Mich., will be the new school head at Croswell.

F. H. BARBEE, superintendent of schools, St. Joseph, Mich., resigned his position on April 5, due to ill health.

GLEN TRAW, superintendent of schools, French Lick, Ind., has accepted the superintendency at Tell City, Ind., for the next school term.

HERBERT GLENN IMEL, principal of Riley High School, South Bend, Ind., died recently of injuries sustained in an automobile accident.

HARRY B. NASH has been promoted from the post of acting superintendent to the superintendency of the school system at West Allis, Wis. MR. NASH has been associated with the West Allis schools for ten years.

WILLIAM SLADE has been elected superintendent of schools, Glendale, Ohio.

DR. CLARENCE L. NYSTROM has accepted the presidency of Spring Arbor Seminary and Junior College, Spring Arbor, Mich. He will assume his duties on June 1, when DR. MERLIN G. SMITH resigns to become president of Chesborough Seminary, North Chile, N. Y.

L. W. FEIK has been reelected superintendent of schools, Sioux City, Iowa. MR. FEIK became superintendent at Sioux City in 1931.

COL. ORVAN GRAFF BROWN, founder and head of the Miami Military Institute, at Germantown, Ohio, died as a result of a heart attack.

Southern States

DR. WILLIAM T. WHITSETT, North Carolina educator and founder of Whitsett Institute, a boarding school for boys, died recently.

LUKE G. WALLACE, former superintendent of Agricultural High School, Charleston, Miss., has been appointed superintendent of schools, Coffeeville, Miss., succeeding W. P. YORK, resigned.

T. U. TAYLOR, dean of the college of engineering; DR. F. W. SIMONDS, professor of geology; DR. MORGAN T. CALLOWAY, professor of English; DR. H. W. HARPER, dean of the graduate school, and DR. W. J. BATTLE, professor of classical languages, were honored guests at the luncheon held in connection with the fifth annual round-up celebration at the University of Texas, April 13 to 15. Two centuries of service to the university were recognized through these five men, each of whom has been on the faculty for more than forty years.

W. F. RUSSELL has been appointed superintendent of schools, Shepherdsville, Ky.

BASCOM H. CALDWELL, instructor in electrical engineering at the University of Texas, has been awarded the Charles A. Coffin Fellowship for advanced research study at Yale University next year.

MAYME SINGLETON of Stanford, Ky., has been named superintendent of schools, Lincoln County, Kentucky, succeeding S. B. GODBEY, who died recently after serving in that capacity for eight years.

LAUGHTON B. EVANS, well known Georgia educator, died of pneumonia on April 6. DOCTOR EVANS attained national distinction through fifty-one years of continuous service as superintendent of schools, Richmond County, Georgia. He was seventy-two years old.

DR. MARVIN S. PITTMAN, a member of the faculty of Michigan State Normal College since 1921, and head of the department of teacher training since 1929, has accepted the presidency of Georgia State Teachers College, Statesboro, Ga., effective July 1.

DR. R. L. MARQUIS, president, North Texas State Teachers College, died recently of heart disease at the age of fifty-four. Until 1923 he was president of Sul Ross Normal School, Alpine, Tex.

Vermont Principals Meet; Normal Conference Planned

The annual Vermont Principals' Conference was held in Montpelier, Vt., April 27 and 28. Willard W. Beatty, superintendent of schools, Bronxville, N. Y., was the principal speaker at the sessions.

The Vermont Normal School Conference will be held at the state house in Montpelier on May 12.

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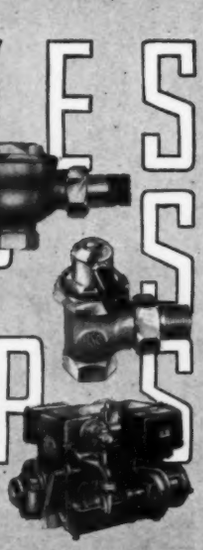

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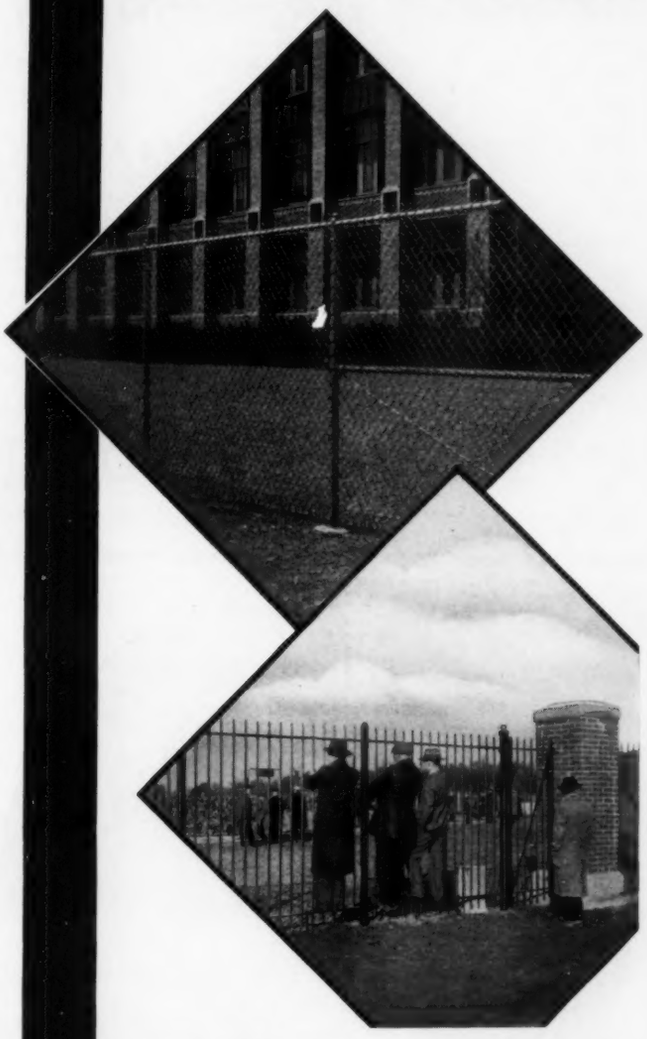

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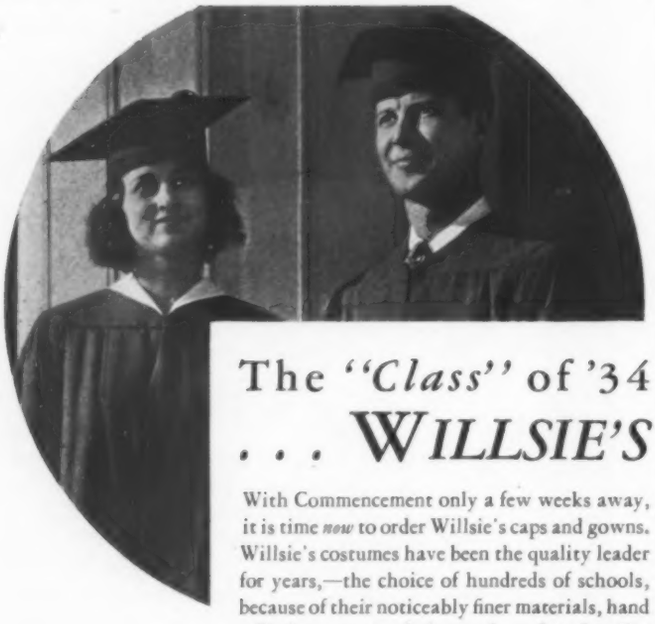

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THE BOOKSHELF

ADVENTURES OF IDEAS. *By Alfred N. Whitehead. New York: The Macmillan Company,* 1933. *Pp.* 392. $3.50.

Here is another brilliant work from the pen of Harvard's gifted philosopher. Vital and revolutionary ideas in the history of mankind are considered in a four-point relationship: sociologic, cosmologic, philosophic and civilization. The style is much simpler than that of the author's earlier productions and the general reading is much easier. It is distinctly meaty and worthy of serious reading and rereading.

COMMERCIAL CORRESPONDENCE COURSES AND OCCUPATIONAL ADJUSTMENTS OF MEN. *By Charles Bird and Donald G. Paterson. Minneapolis: University of Minnesota Press, Employment Stabilization Research Institute, Volume II, Number* 7, 1934.

With the recent movement in certain centers toward a "marriage" between commercial correspondence courses and public secondary education as an "economy measure," this research by two members of the University of Minnesota faculty is most timely. Their findings indicate that enrollment in correspondence courses is "evidence merely of aspiration, ambition and desire for advancement." Further, "an important cause of the excessively high mortality is the failure . . . to select men with sufficient ability. . . ."

CHARTERS AND BASIC LAWS OF SELECTED AMERICAN UNIVERSITIES AND COLLEGES. *Compiled and edited by Edward C. Elliott and M. M. Chambers. New York: Carnegie Foundation for the Advancement of Teaching,* 1934. *Pp.* 640. *Available on request.*

This book is a distinct contribution to the legal literature of higher education in the United States. The charters and basic laws of fifty-one representative institutions, representing type variations, are presented together with a tabulation of the governing boards and a brief history of each institution.

SCIENCE AND SANITY. *By Alfred Korzybski. Lancaster, Pa.: The Science Press,* 1933. *Pp.* 798.

The purpose of this book, which is an introduction to non-Aristotelian systems and general semantics, may be inferred from the following passage: "Technically we are very advanced, but the *elementalistic premises* underlying our human relations, practically since Aristotle, have not changed at all. The present investigation reveals that in the functioning of our nervous systems a special harmful factor is involved . . . which retards the development of sane human relationships and prevents sanity." This factor the author calls "identification." He traces its effects through all phases of human thought and life, and attempts to establish more truthful premises in its place.

Judgment as to the merit of the book is certain to be extremely varied. By some, it is likely to be regarded as the incoherent ravings of a madman; by others, as the most wonderful product of our age. The author claims that "the work is written on the level of the average intelligent layman," which puts the reviewer in the moron class, because only after repeated readings of a single page does its meaning become apparent to him. Once grasped, however, it proves to be the most enlightening and the most fundamental philosophy of meanings encountered in recent years.

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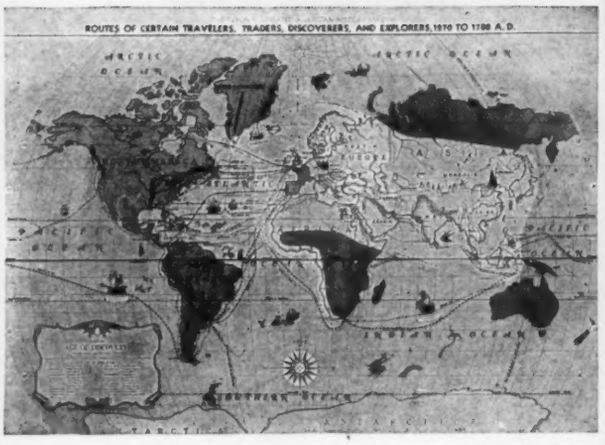

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READER OPINION

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Editor, The NATION'S SCHOOLS:

The superintendent of schools must achieve leadership in the local situation. When a board of education engages a superintendent it expects him to superintend and to serve as the actual head of the school system, administering matters under the board's legislative direction. Hence the position of the superintendency contemplates a man who is both *de jure* and *de facto* the head of the system, who initiates, interprets and administers for the board.

In the early days of my own educational experience I heard a lecture on the subject of happiness that has often come to mind when problems arise. Said the lecturer: "If you are out of tune with your environment and are leading a life of frustration, no matter what the details may be, there are three courses of action open. First, change yourself, and if that is impossible due to conscience or other limitations, change your environment by bringing it to the same level as yourself, and finally, if no way out appears, the remaining alternative is to get out."—*Albert B. Kellogg, Superintendent of Schools, Claremont, N. H.*

Likes Filene Article

Editor, The NATION'S SCHOOLS:

Mr. Filene's article in the March number is a corker and a marvel of straight thinking as applied to both business and education. You ought to reprint it and not let it be buried in the files. Anyway, I would like half a dozen copies of the March issue. I want all our students, faculty and trustees to read this article.—*George W. Coleman, Babson Institute, Babson Park, Mass.*

More From Mr. Hewson

Editor, The NATION'S SCHOOLS:

Mr. Proctor's rejoinder to my article in the January issue saddens me. If public education's leadership concurs in such inertia and defeatism, it augurs ill for the new America.

Mr. Proctor admits and even praises my educational postulates and yet tells me nothing can be done about the situation. He says the trend in public education is back to fundamentals. He complains that the politician and the layman will do nothing for him. Why should they when they do not know what it is all about?

The educational system has made the politician and the layman the social, political and economical illiterates they are. They have been equipped with an "ox cart" 1834 model education with which to solve the problems of an intricate, strange and unexampled environment.

What if a worth while curriculum does cost more than the present one? Incidentally, I do not believe it would if the first eight years were used intelligently and the last four were properly organized. It is Mr. Proctor's job and the job of his colleagues to supply and sell a sound educational system to America if democracy is to survive.

The reason American average intelligence is only that of the twelve-year-old is not so much lack of capacity as it is the fact that much learning has been made so drab and uninteresting that most people flee from it like a pestilence. If civilization is to endure, educators must cease attempting to rationalize absurdities.—*Arthur B. Hewson, Arlington Heights, Ill.*

LET'S KEEP THE RECORDS STRAIGHT

DEPARTMENT of Commerce reports indicate that for the first three months of this year approximately half, (48% to be exact), of all heating and ventilating units selected by school authorities were manufactured by The Herman Nelson Corporation. The remaining 52% was left to be divided among all other manufacturers.

These figures we believe to be highly significant, for they show that the nation is again returning to normal thinking after a year of cheapened products and slashed prices.

Many years have passed since The Herman Nelson Corporation introduced the first really workable air-conditioning unit for schools. Its advantages over all other methods were immediately recognized. Hardly had the pioneer work of developing and establishing the new product been completed, when other manufacturers offered competing products at varying prices. This was to be expected, and yet throughout the intervening years The Herman Nelson Corporation has led the field in number of units installed, until today there are over four thousand schools equipped with Herman Nelson Air Conditioning Units.

Cnly in 1933 when building construction was at a low ebb (and we print this fact here to keep the records straight), did the volume of unit ventilators sold by Herman Nelson fall below that of any other manufacturer. During those days of hectic buying and cheapened products, Herman Nelson was forced to choose between maintaining the high standard of their product, or lowering it to secure a higher sales volume. It is hardly necessary to mention that the former course was chosen. It was felt that in time architects and school authorities would approve this stand . . . They have!

Herman W. Nelson
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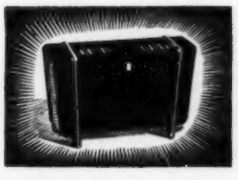

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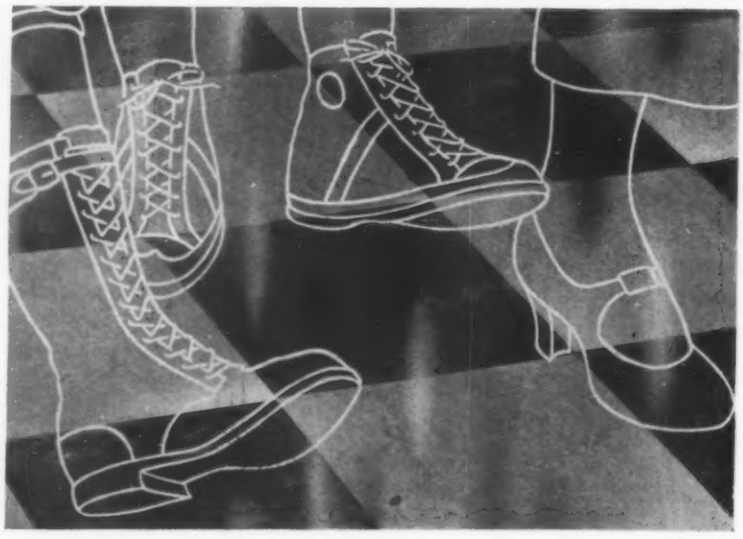

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CONTENTS

For June, 1934

SECTION I—EDUCATIONAL ADMINISTRATION

SECTION II—THE SCHOOL PLANT

Side Glances—

IT IS with deep regret that we chronicle the resignation of Dr. George F. Zook as United States Commissioner of Education. During the year of his incumbency Doctor Zook made an enviable record in the federal office. Fair, objective and nonpartisan in his attitude, he approached every problem with open mind and a social point of view that won for him the respect and admiration of his colleagues in federal office as well as the profession itself. He was never flustered or hurried. He thought each problem through to its possible terminal conclusions before acting administratively. He did much to increase the prestige of the commissionership position.

We congratulate Doctor Zook on his new work, the leadership of the American Council of Education. Here again he holds an enviable position. He will be able to continue the work already started, free from institutional limitations. He will be working in a wider field of action and influence.

WE congratulate the Administration upon the appointment of Doctor Zook's successor without regard to partisanship. In the appointment of Doctor Zook, the recommendations of outstanding impartial educational leaders were secured and acted upon. Political considerations did not enter. In searching for a worthy successor politics were again forgotten and an initial choice was made by a group of outstanding educationists. The final recommendation fell upon a practical school administrator, a superintendent of public schools. John Ward Studebaker, since 1920 head of the city schools of Des Moines, Iowa, was selected from a field of six outstanding candidates, all of

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CONTENTS

whom had received initial consideration for their professional work. Certainly the manner of making these two appointments cannot help but increase the confidence of the profession in the Administration.

Mr. Studebaker was early in the van in the field of scientific education. He was among the pioneers in the testing

John Ward Studebaker

field and has achieved an excellent record in city school administration. He is a native of Iowa and took his bachelor's degree at the state university. Columbia gave him his master's degree. He represents the educational ideas and tendencies of the Middle West. The profession wishes him well.

THE case for federal aid has been ably presented in earlier issues this year by Dr. John K. Norton, Dr. Paul R. Mort and others. Editorially we have given advice to be cautious and conservative about proceeding in this direction. In the July issue we present the first article definitely to attack the position taken by earlier exponents. It is written by Dr. John J. Tigert, now president of the University of Florida, but Commissioner of Education (1921-28) under Presidents Harding and Coolidge.

SUPT. A. J. Stoddard, Providence, R. I., offers in July the results of practical administration with sound pictures as a factor in class size.

SUPT. N. C. Kearney, Hanc[illegible] Minn., will raise in the July issue a s[illegible] of significant questions on what he considers as certain fallacies behind educational method.

REGULAR FEATURES

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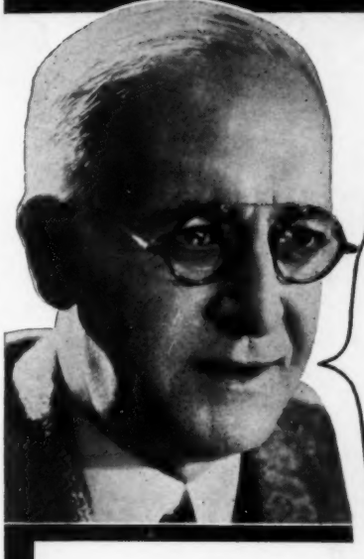

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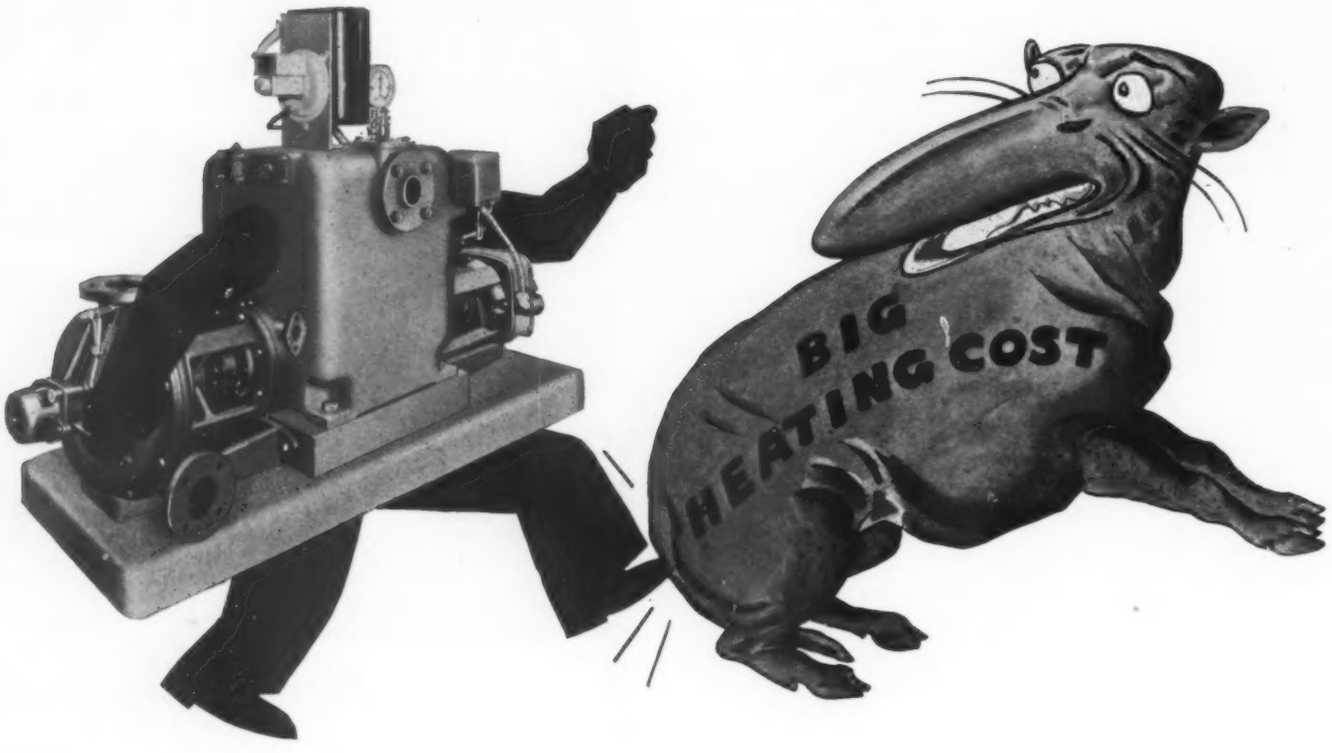

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